

1/83

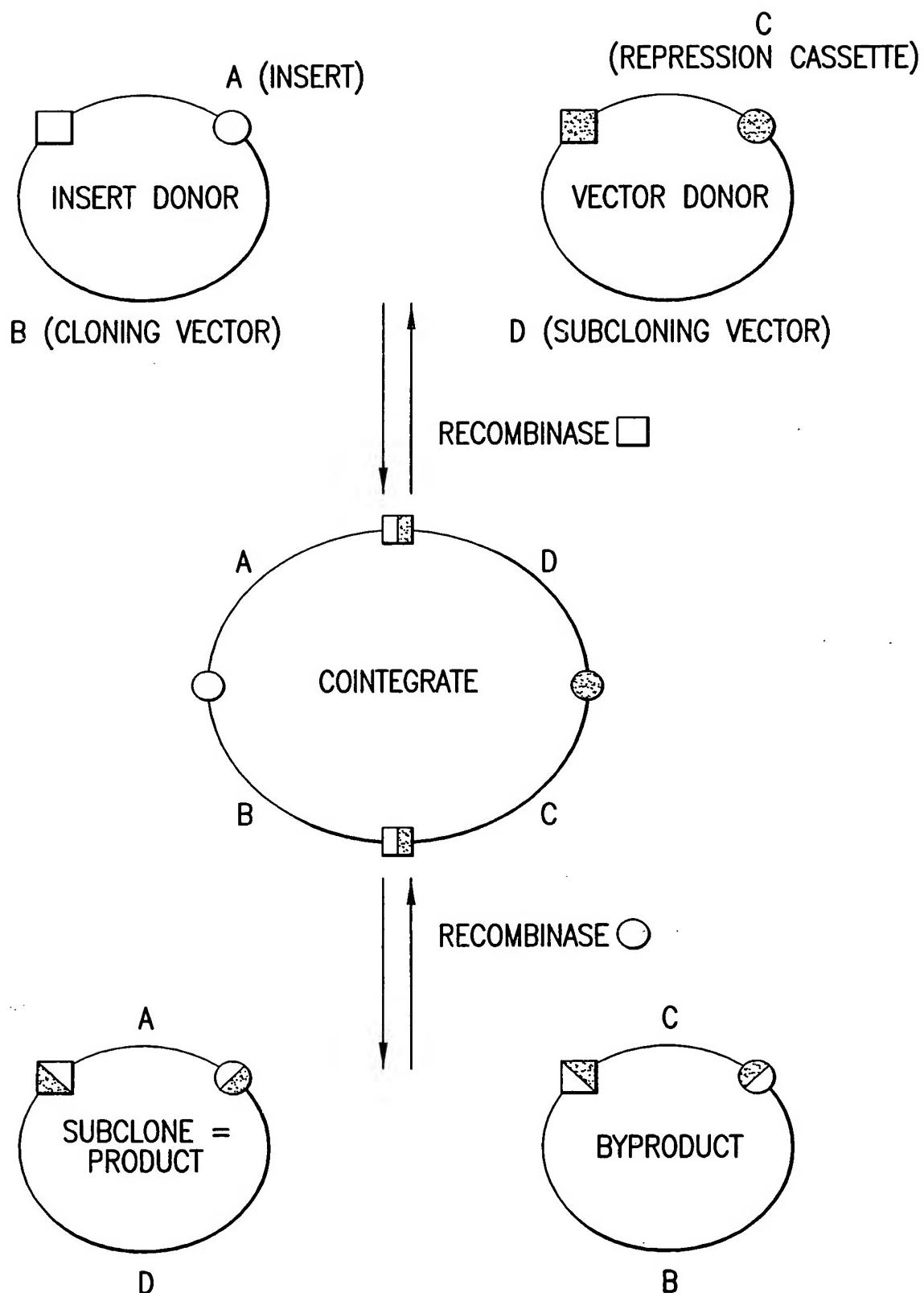


FIG. 1

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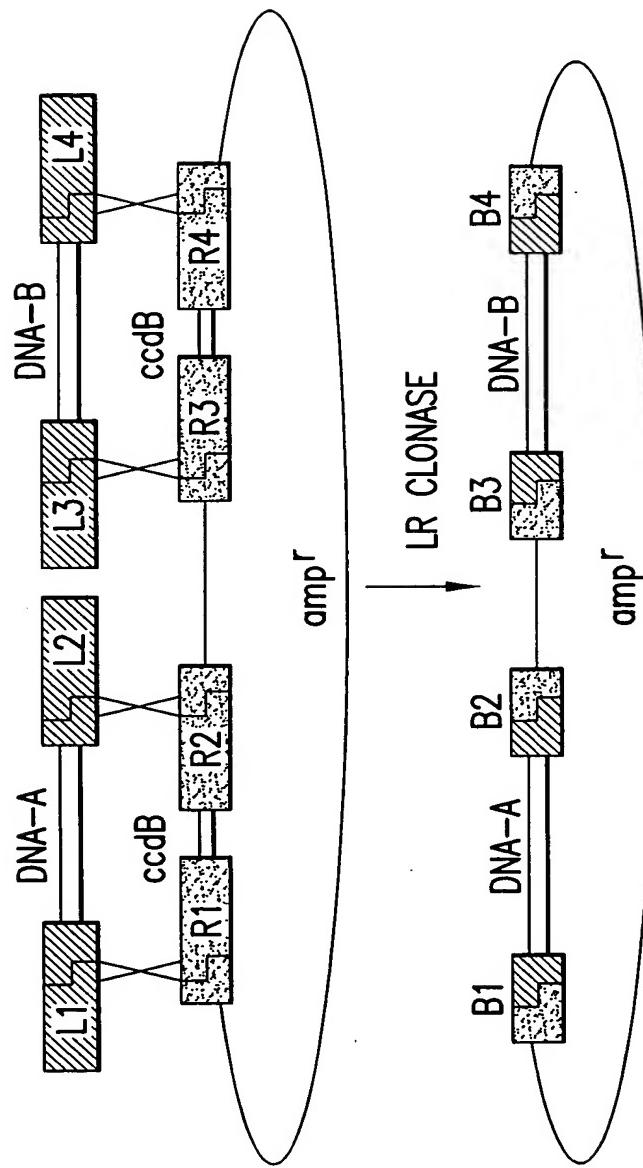


FIG. 2

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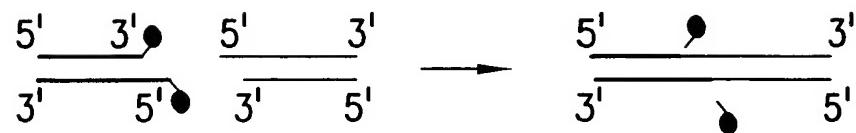


FIG.3A

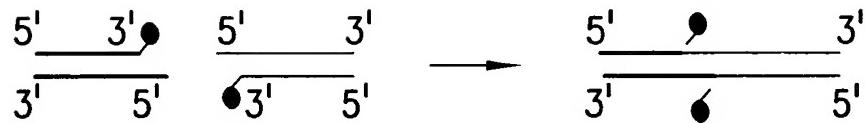


FIG.3B



FIG.3C

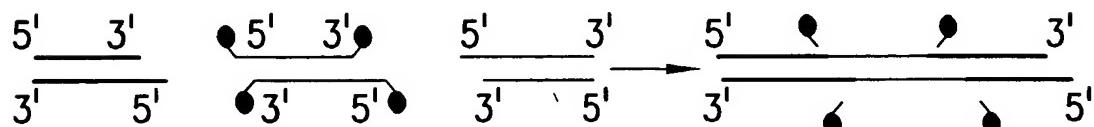


FIG.3D

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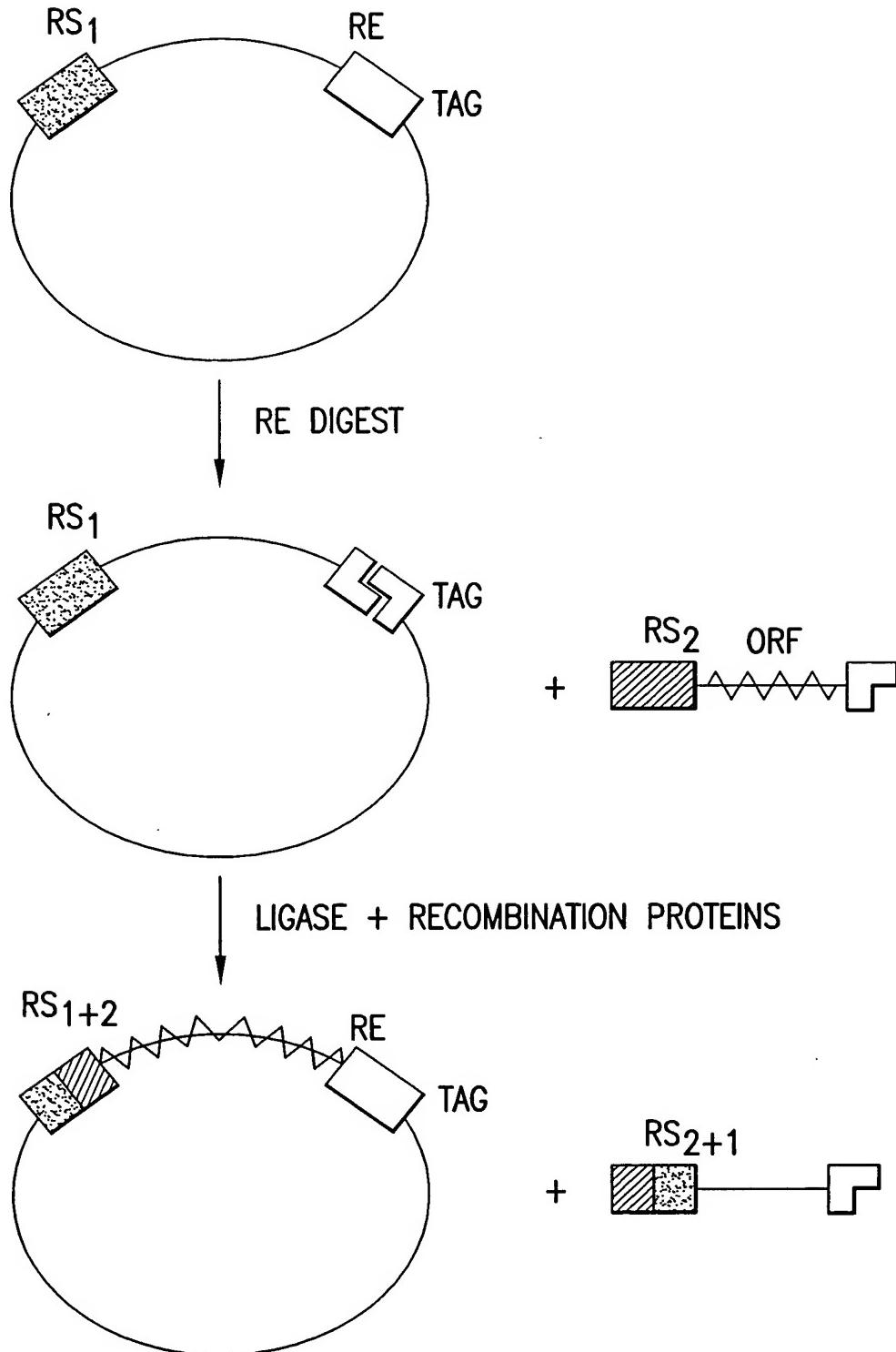


FIG.4

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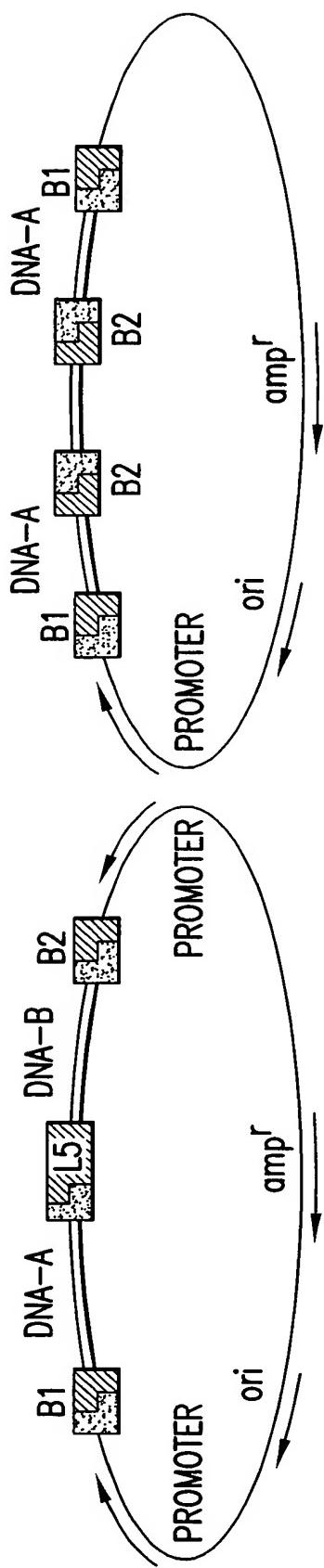


FIG. 5A

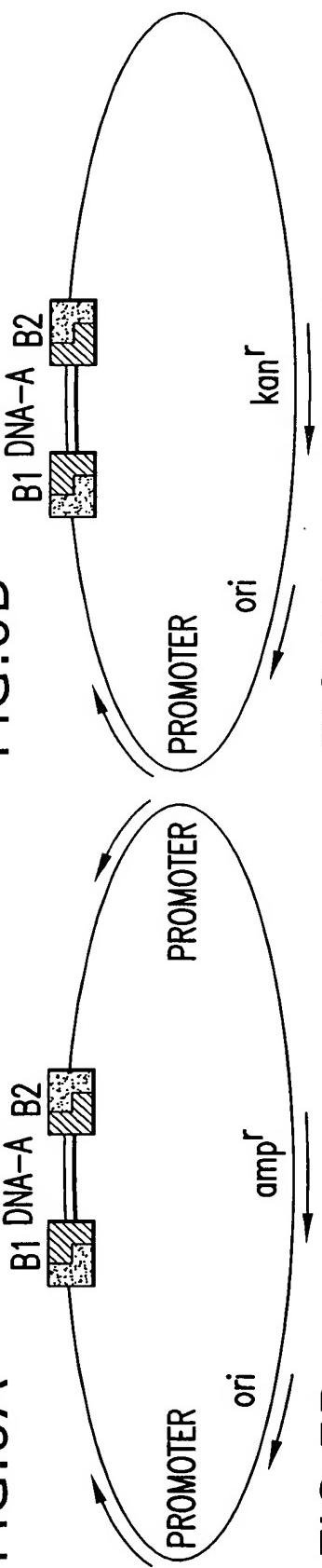


FIG. 5B

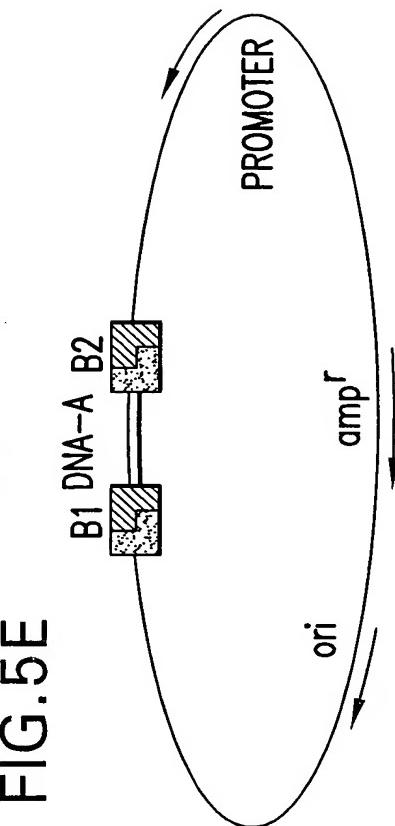


FIG. 5C

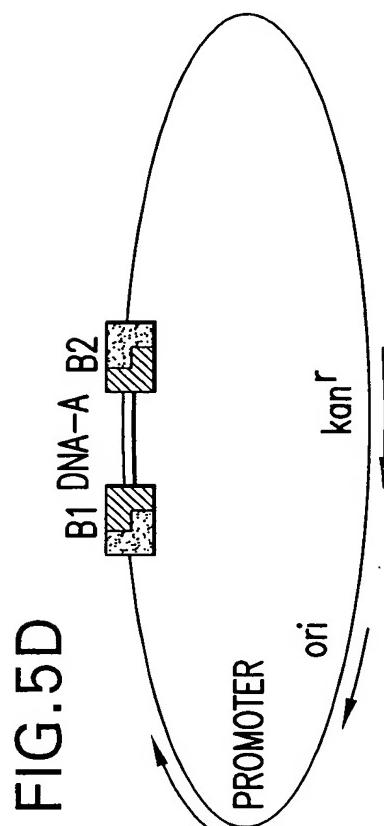


FIG. 5D

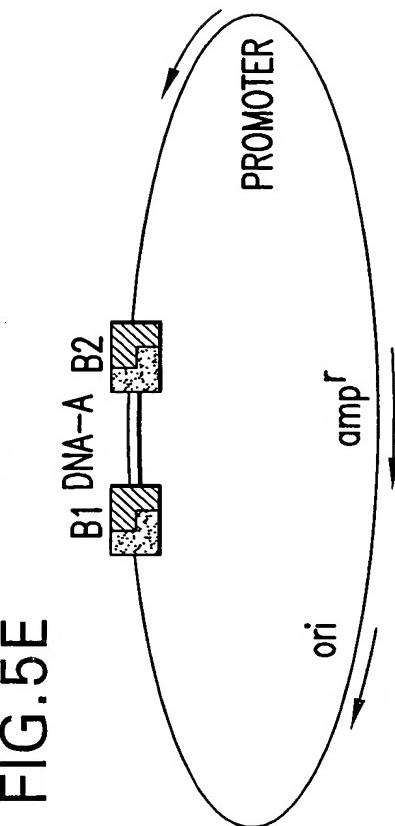


FIG. 5E



FIG. 5F

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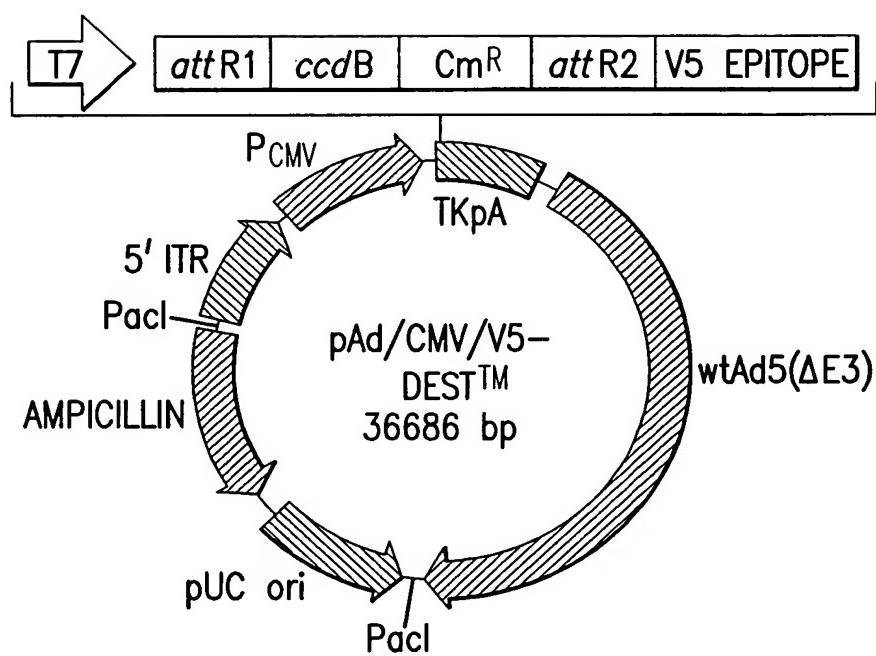


FIG. 6

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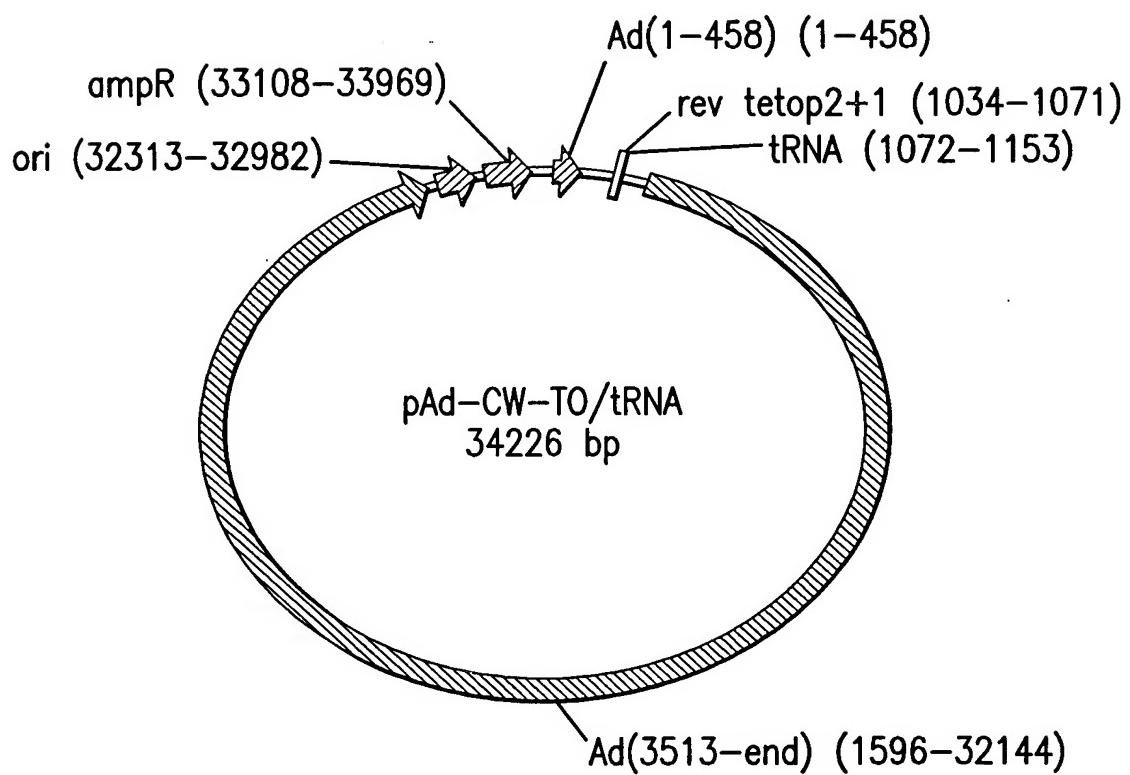


FIG.7

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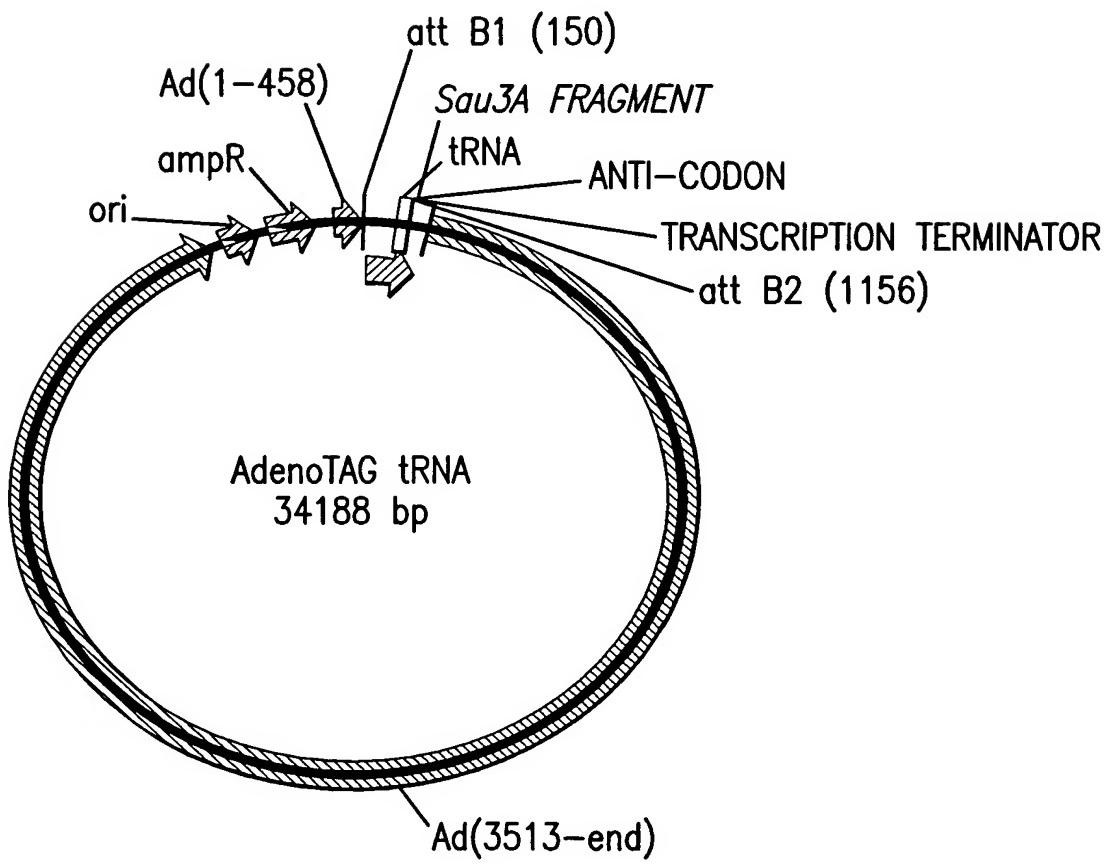


FIG.8

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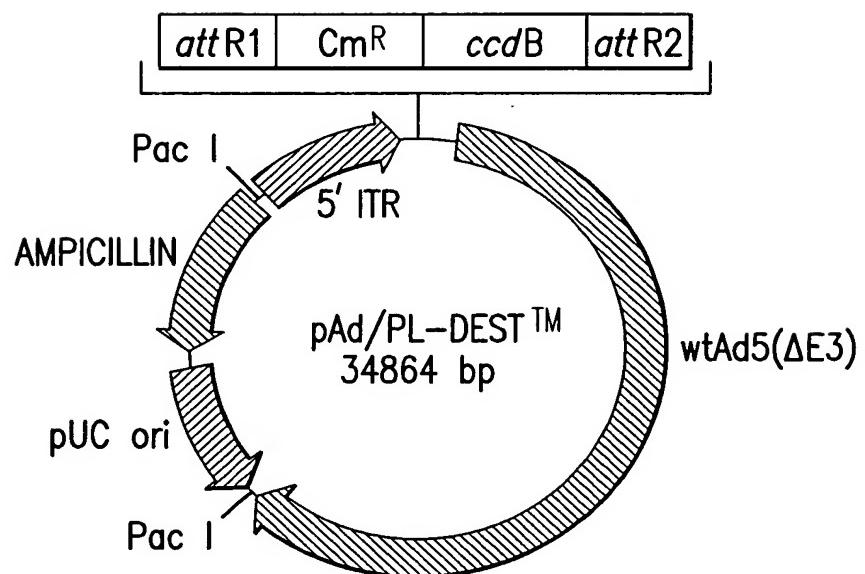


FIG. 9

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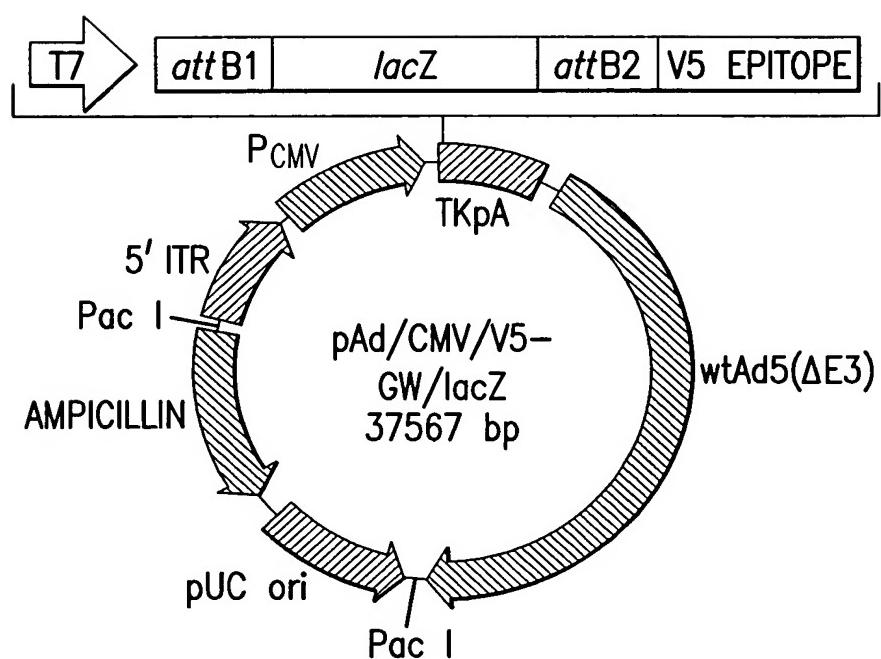


FIG. 10

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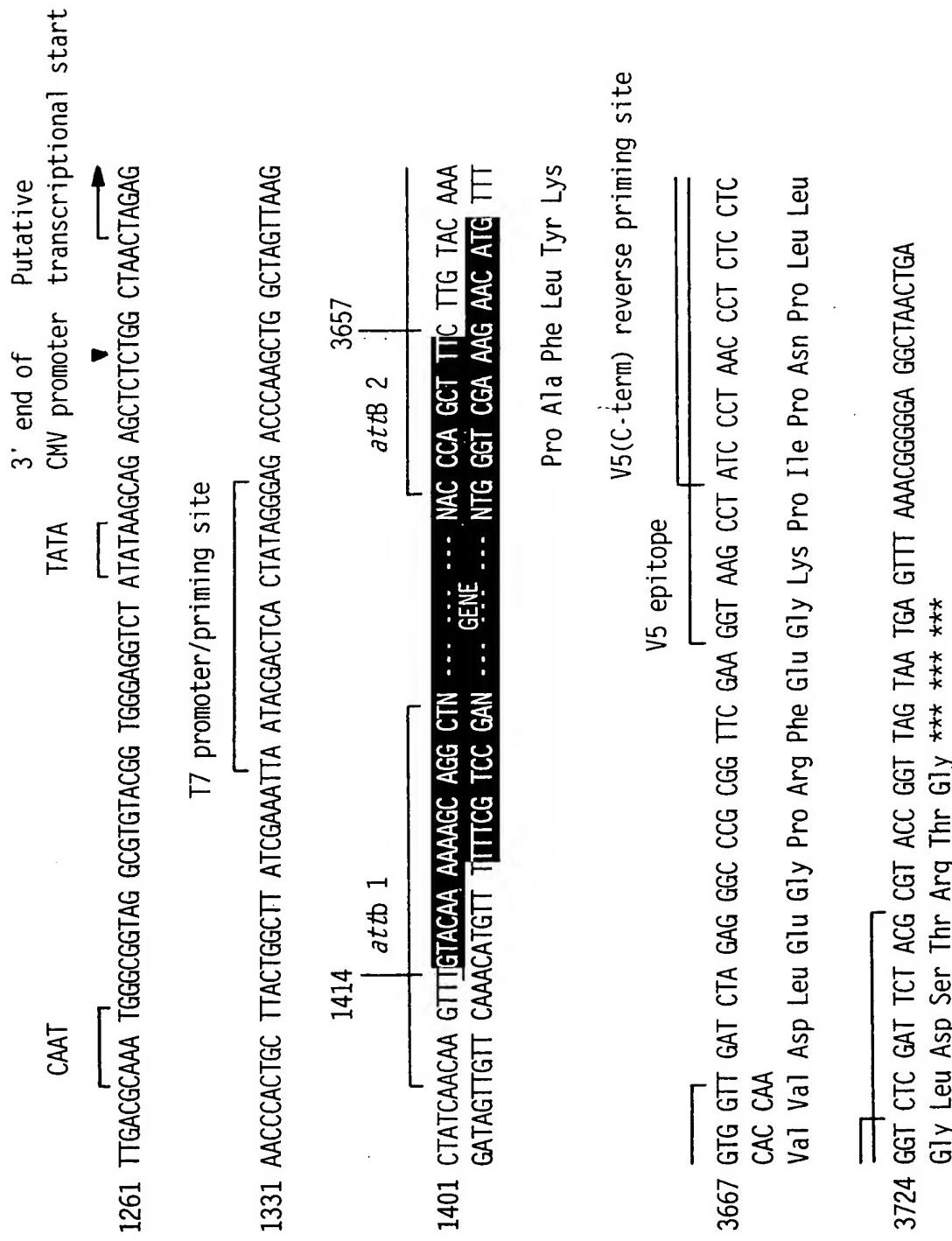


FIG. 11

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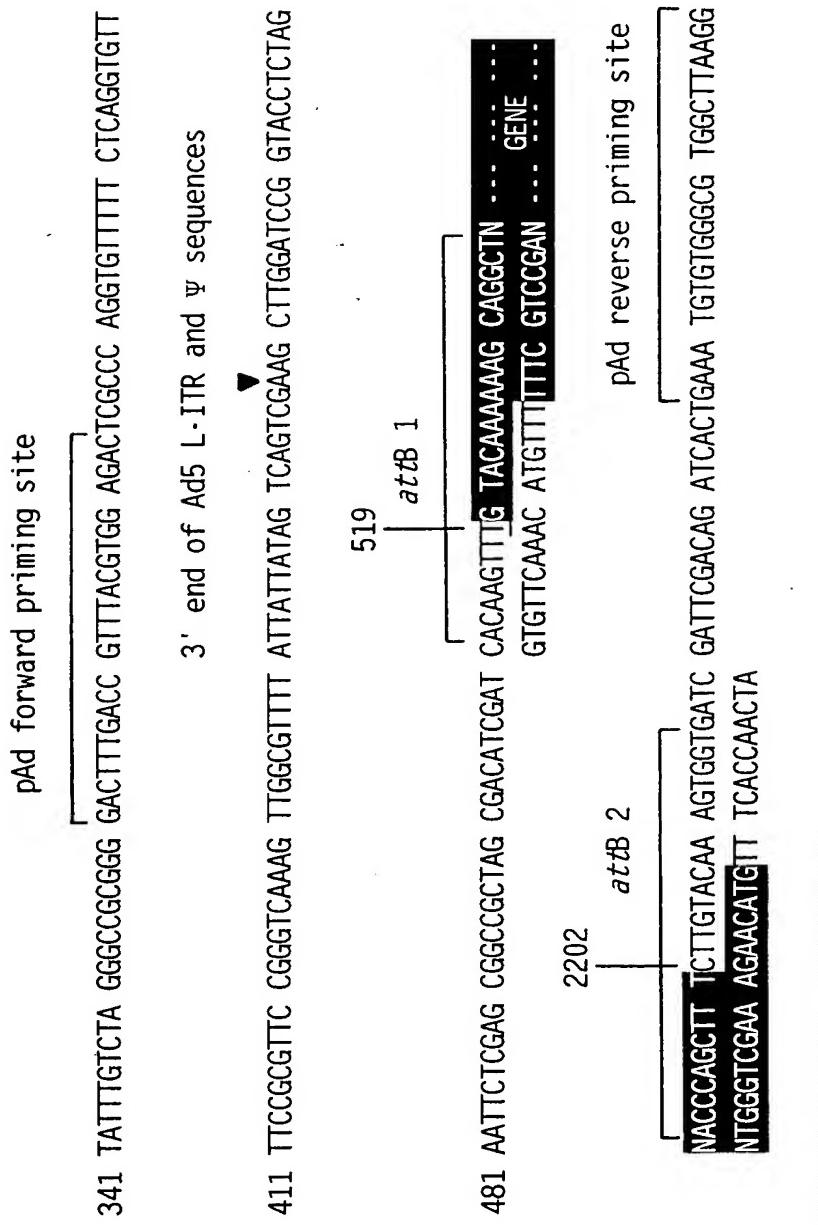


FIG. 12

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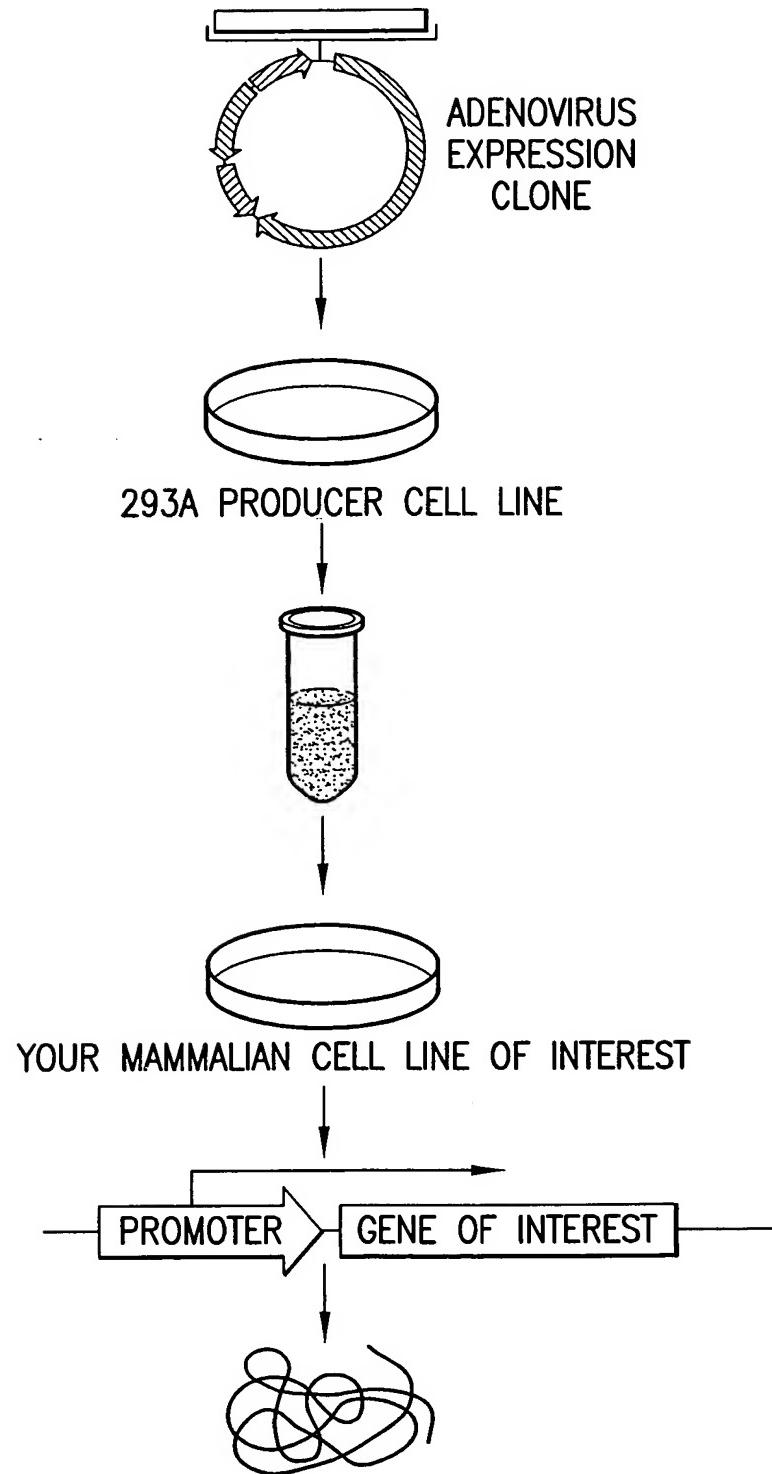


FIG. 13

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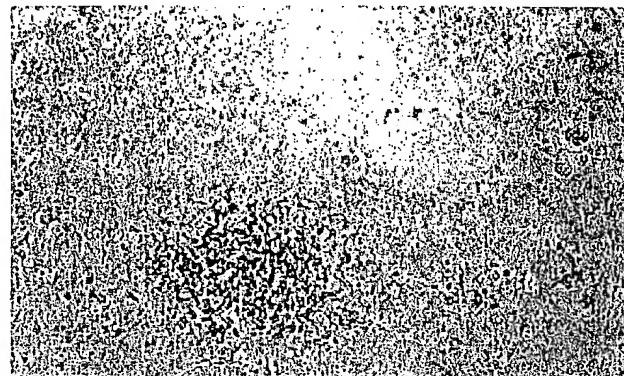


FIG. 14A

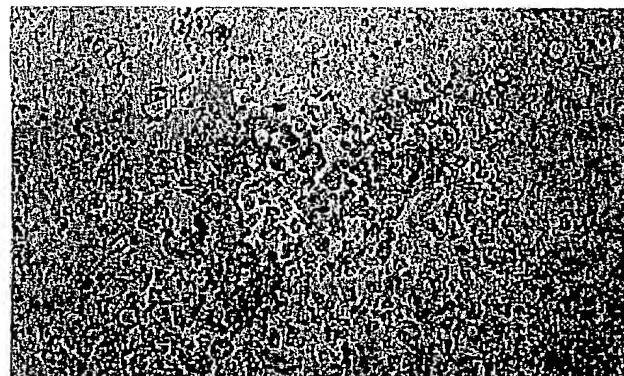


FIG. 14B

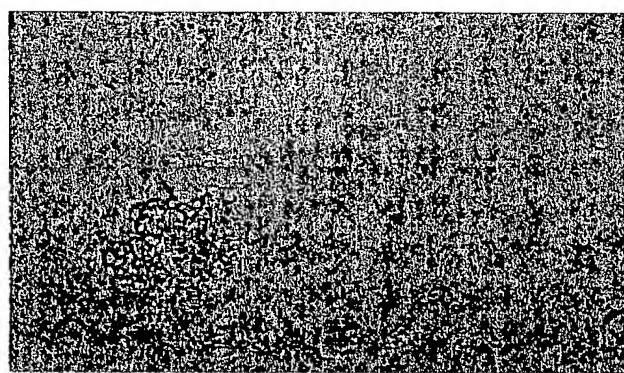


FIG. 14C

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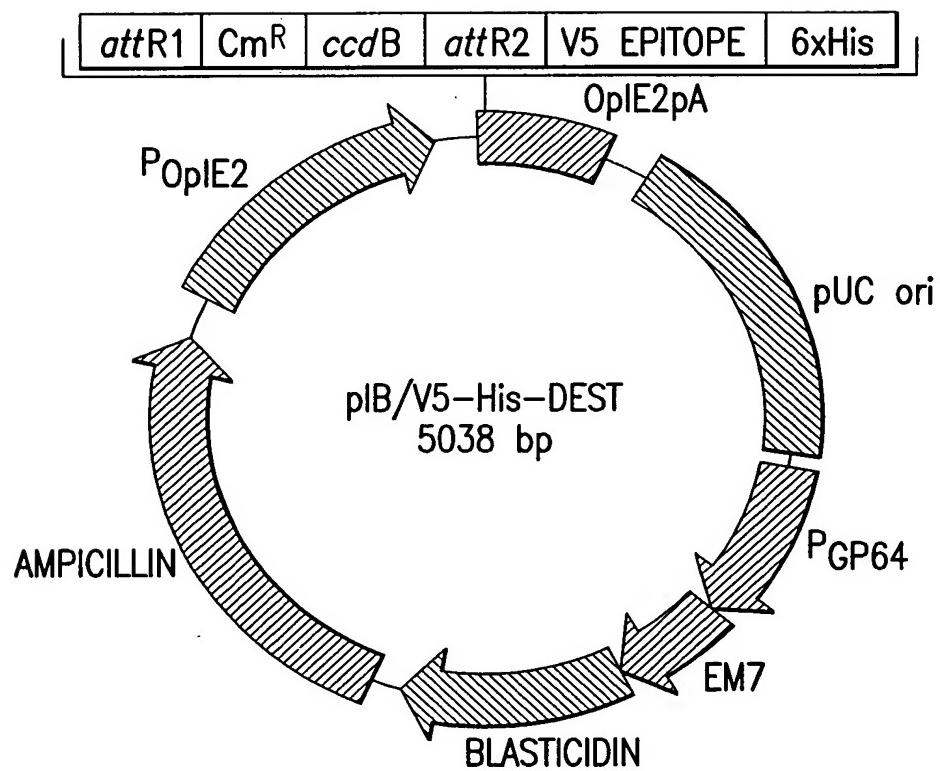


FIG. 15

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1 GGATCATGAT GATAAACAT GTATGGTGCT AATGTGTGCTT CAACAAACAAT TCTGTGTGAC

61 TGTGTTTCA TGTTGCCAA CAAGCACCTT TATACTCGGT GGCCCTCCCCA CCACCAAACCT

121 TTTGGACTG CAAAAAAACA CGCTTTGCA CGCGGGCCA TACATAGTAC AAAACTCTACG

181 TTTCGTAGAC TATTACAT AAATAGTCTA CACCGTTGTA TAGCTCCAA ATACACTACC

241 ACACATTGAA CCTTTTGCA GTGCAAAAAA GTACGTGTGCG GCAGTCACGT AGGGCGGCCT

301 TATCGGGTCG CGTCCCTGTCA CGTACGAATC ACATTATCGG ACCGGACGAG TGTGTCTTA

361 TCGTGACAGG ACGCCAGCTT CCTGTGTGTC TAACCGCAGC CGGACGCAAC TCCTTATCGG

421 AACAGGACGC GCCTCCATAT CAGCCGGCG TTATCTCATG CGCGTGACCG GACACGGGC

481 GCCCGTCCCG CTTATCGCGC CTATAAATAC AGCCCGCAAC GATCTGGTAA ACACAGTTGA

541 ACAGGCATCTG TTCGAATTAA

The diagram illustrates the sequence of DNA strands with several regions highlighted by brackets:

- A bracket labeled "TATA" covers the sequence from position 421 to approximately 455.
- A bracket labeled "Start of Transcription" covers the sequence from position 481 to approximately 515.
- Two brackets labeled "GC-rich" cover the sequences from positions 121 to 181 and 361 to 421.
- Two brackets labeled "AC-rich" cover the sequences from positions 61 to 121 and 481 to 541.

FIG. 16

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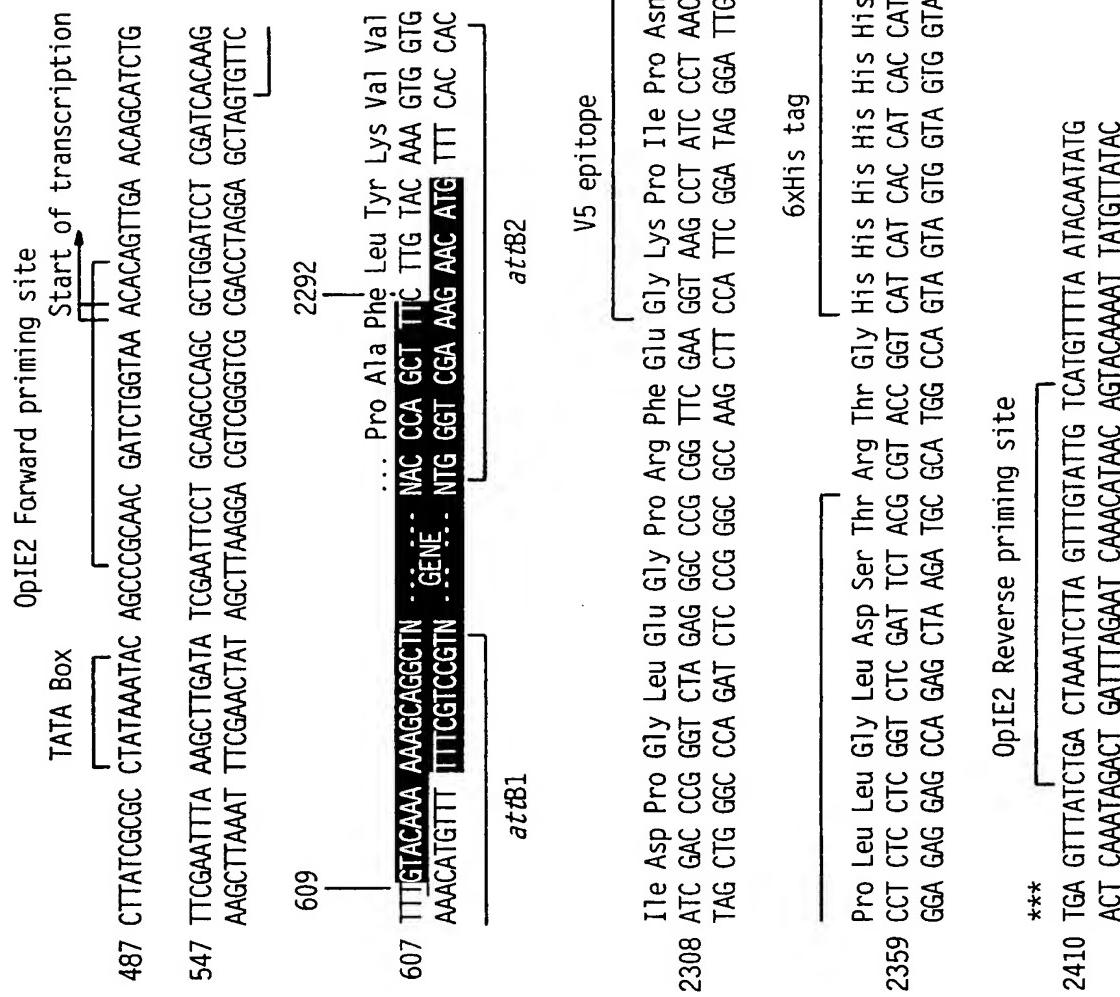


FIG. 17

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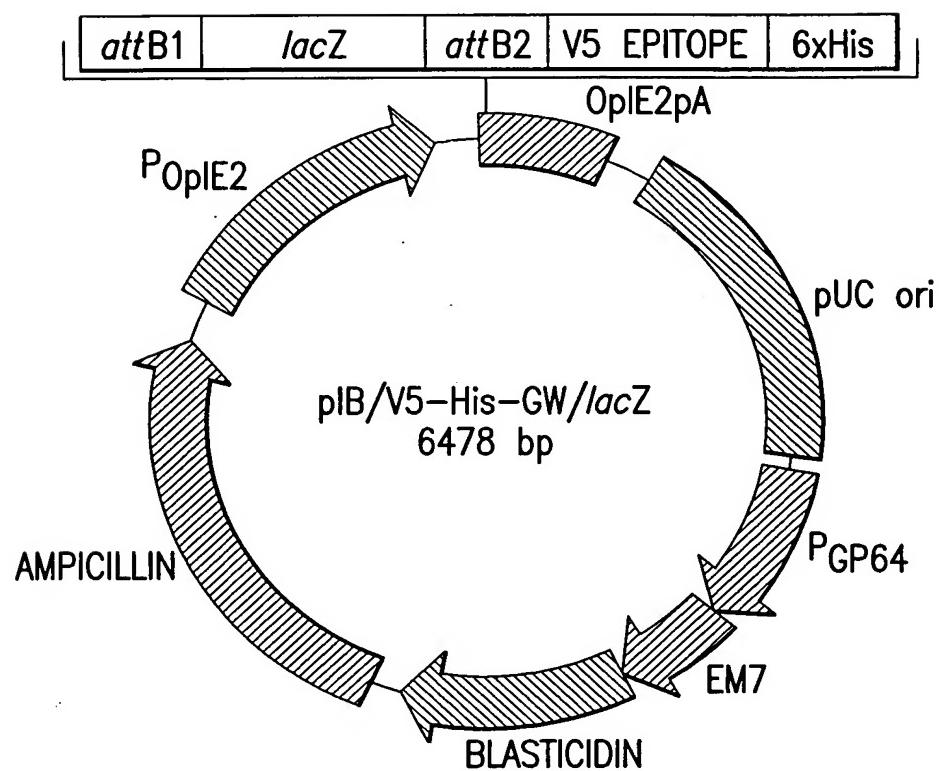


FIG. 18

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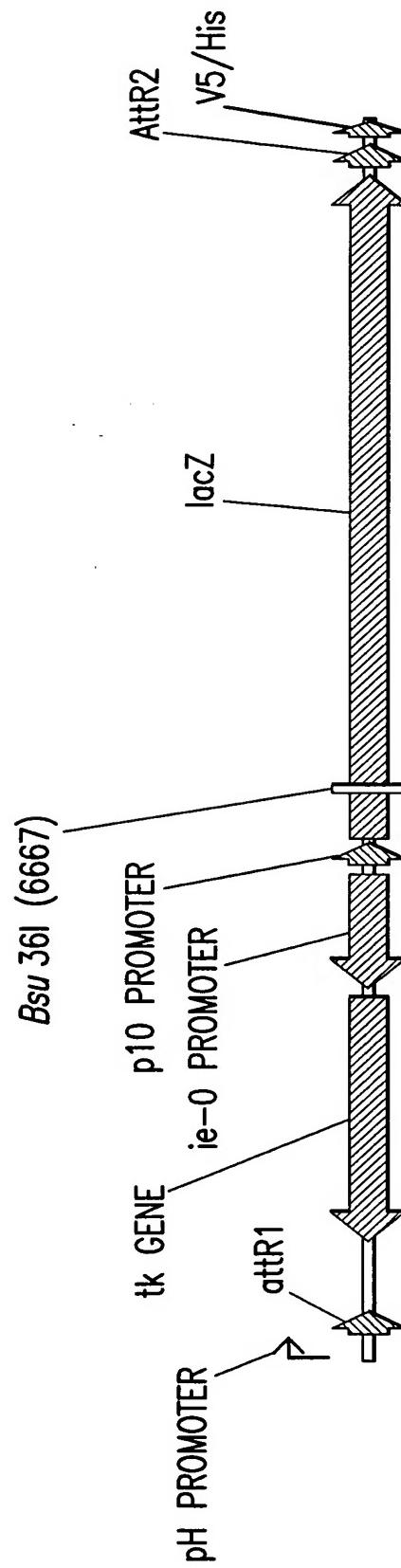


FIG. 19A

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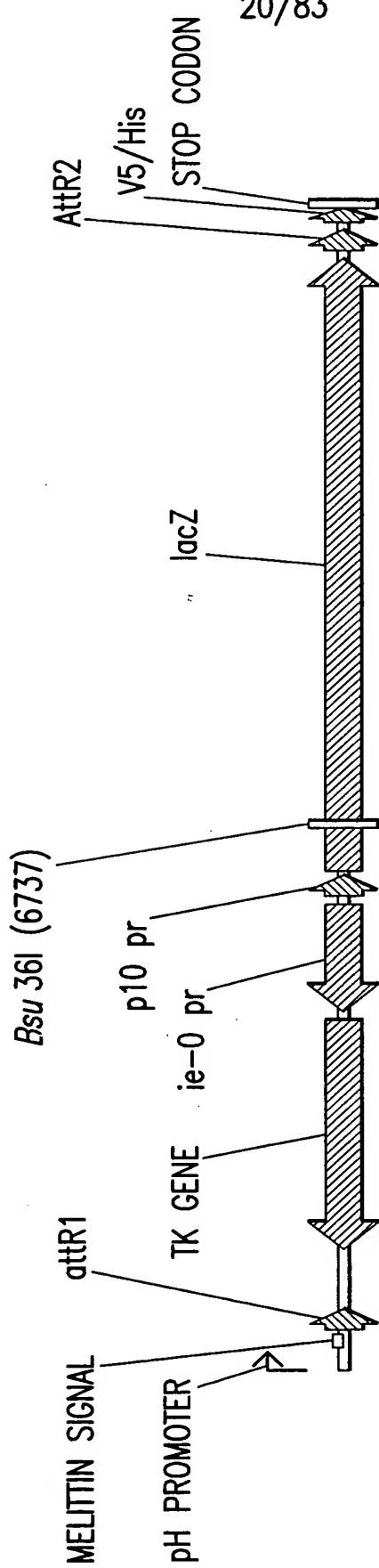


FIG. 19B

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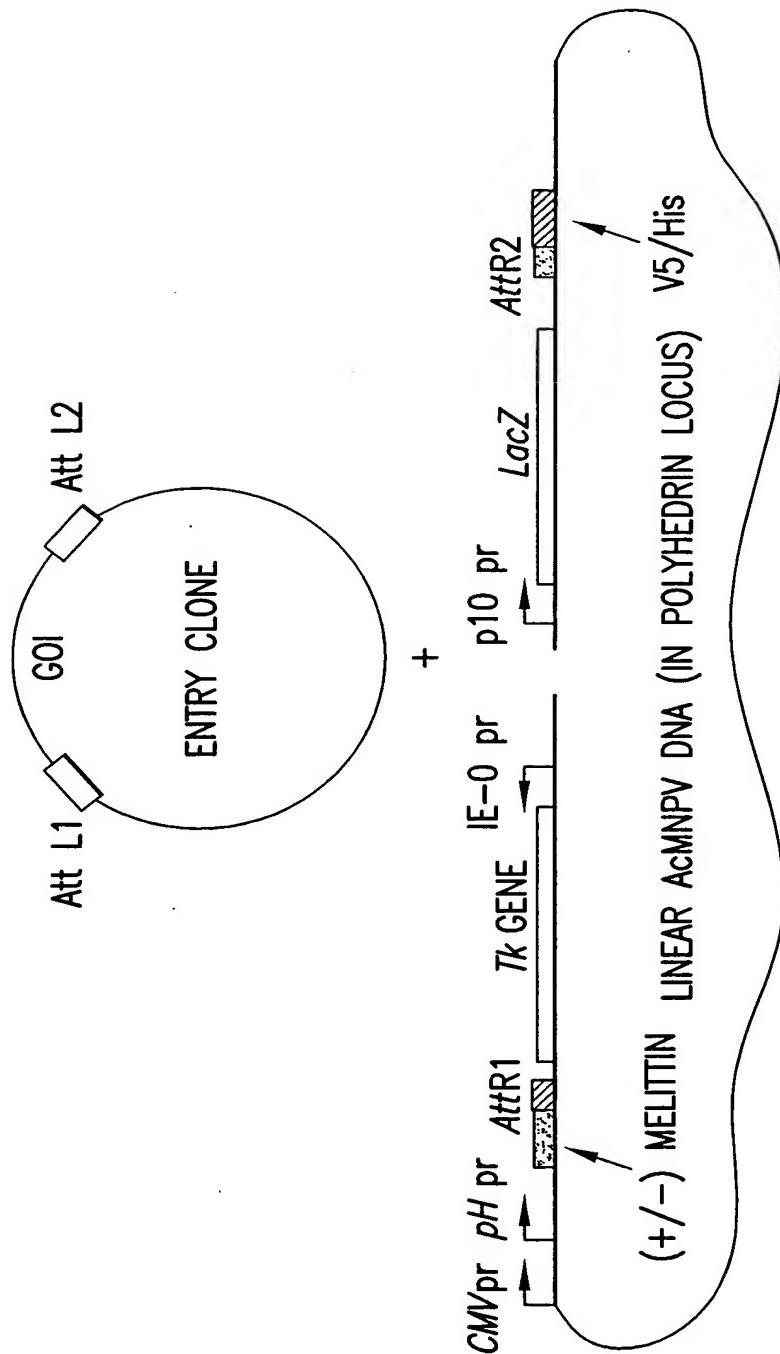


FIG. 20

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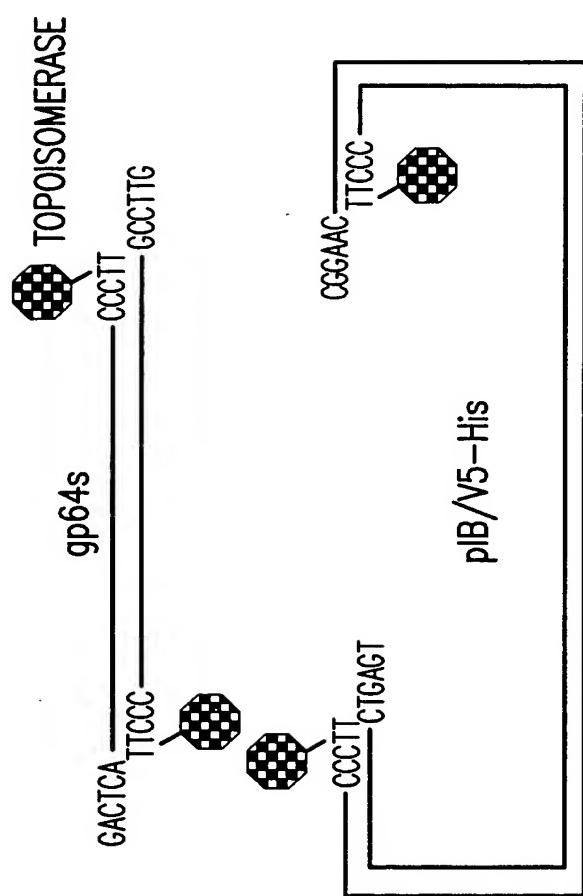


FIG.21

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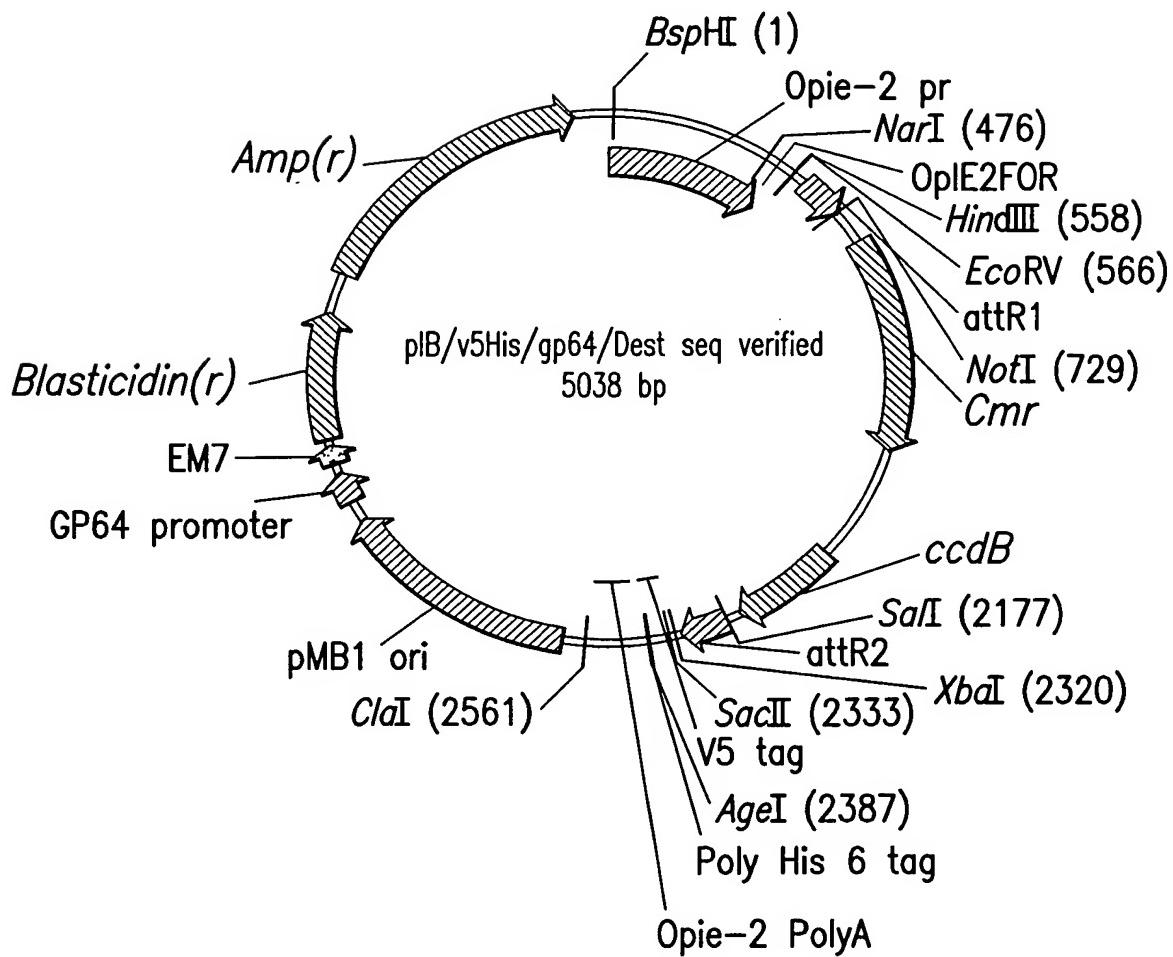


FIG.22

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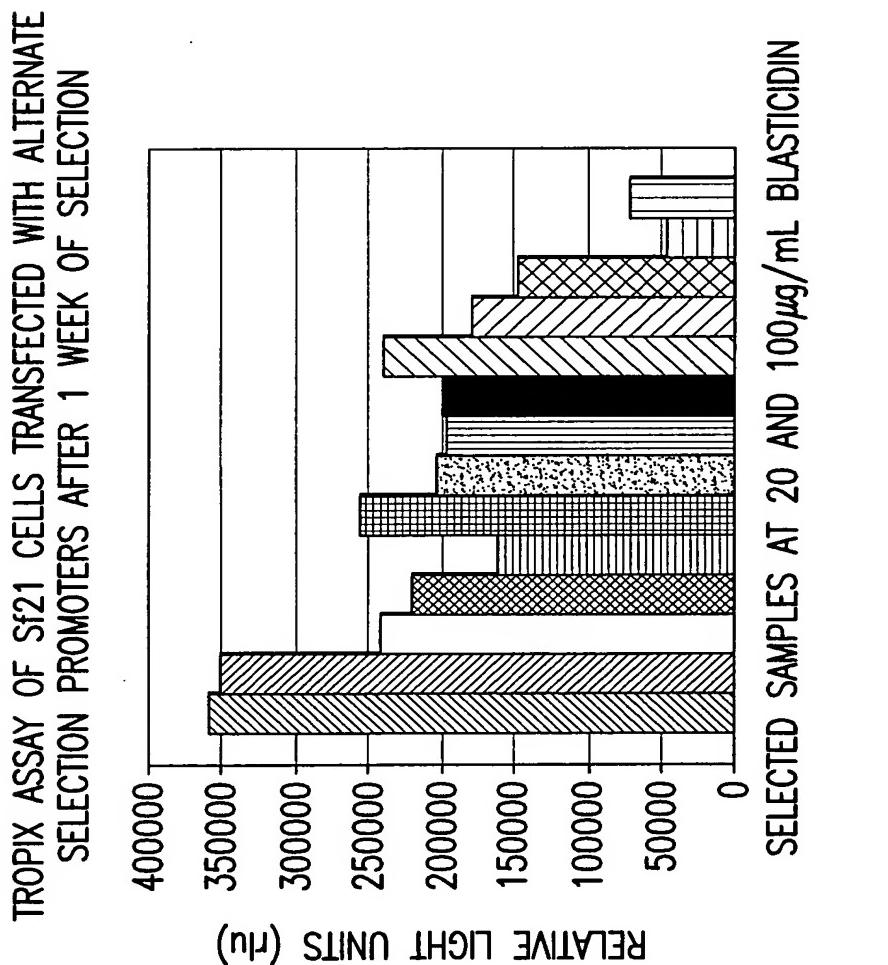


FIG. 23

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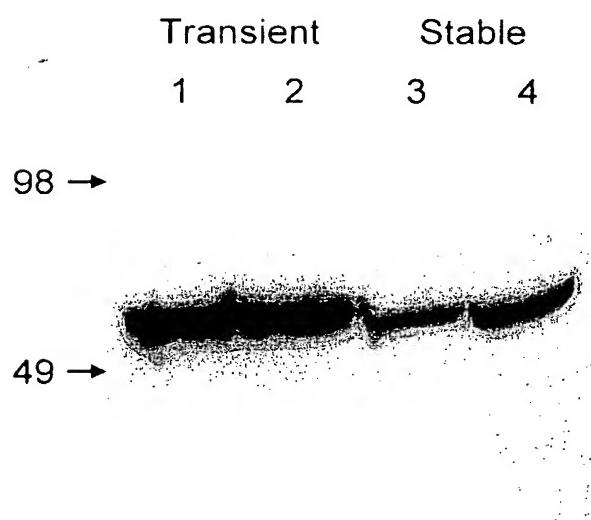


FIG.24

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Calmodulin TFIIIs

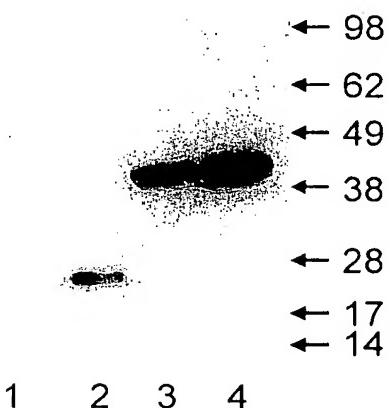


FIG. 25A

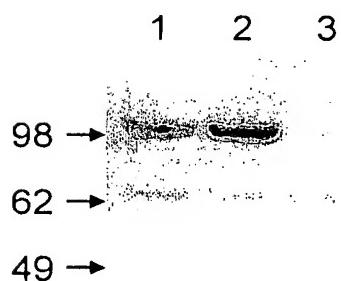


FIG. 25B

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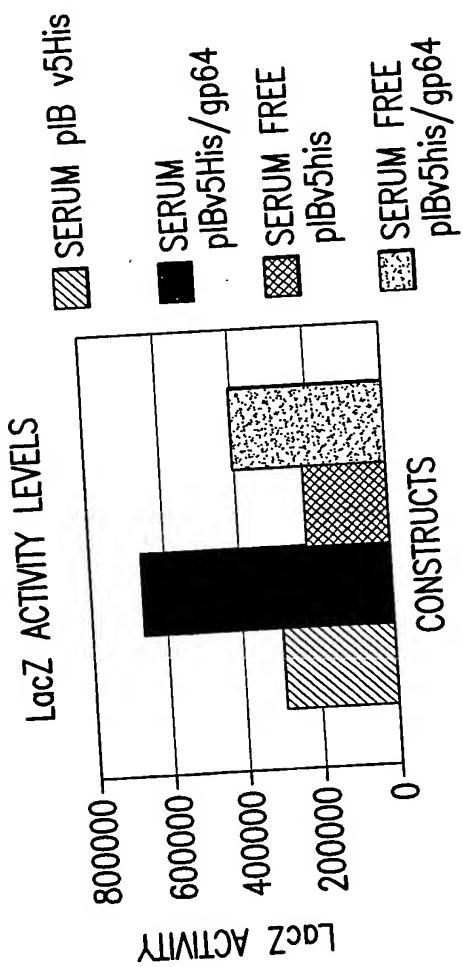


FIG. 26

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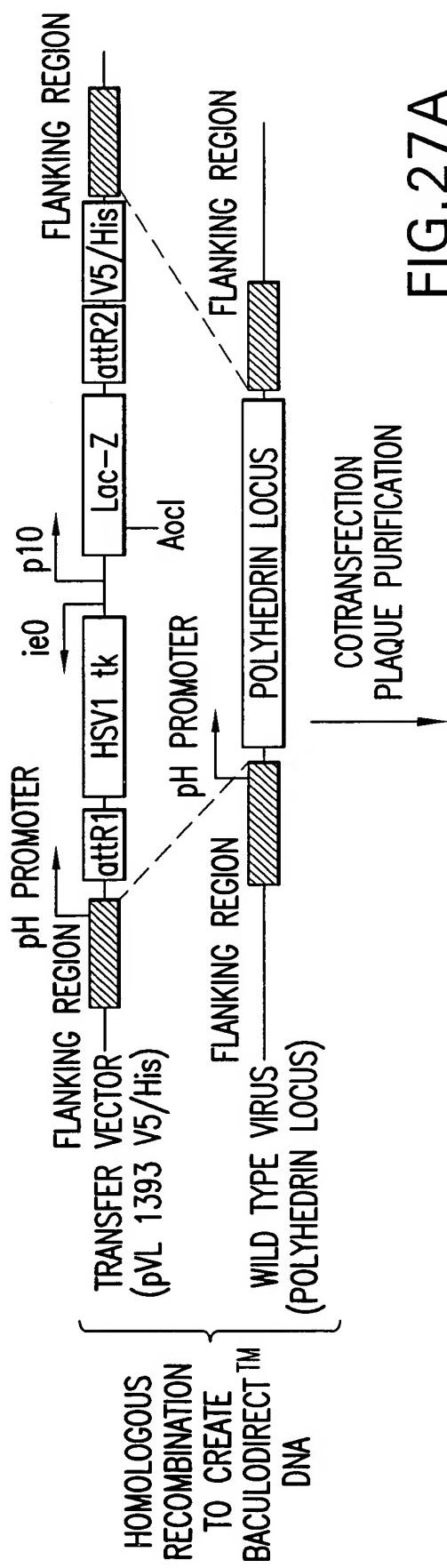


FIG. 27 A

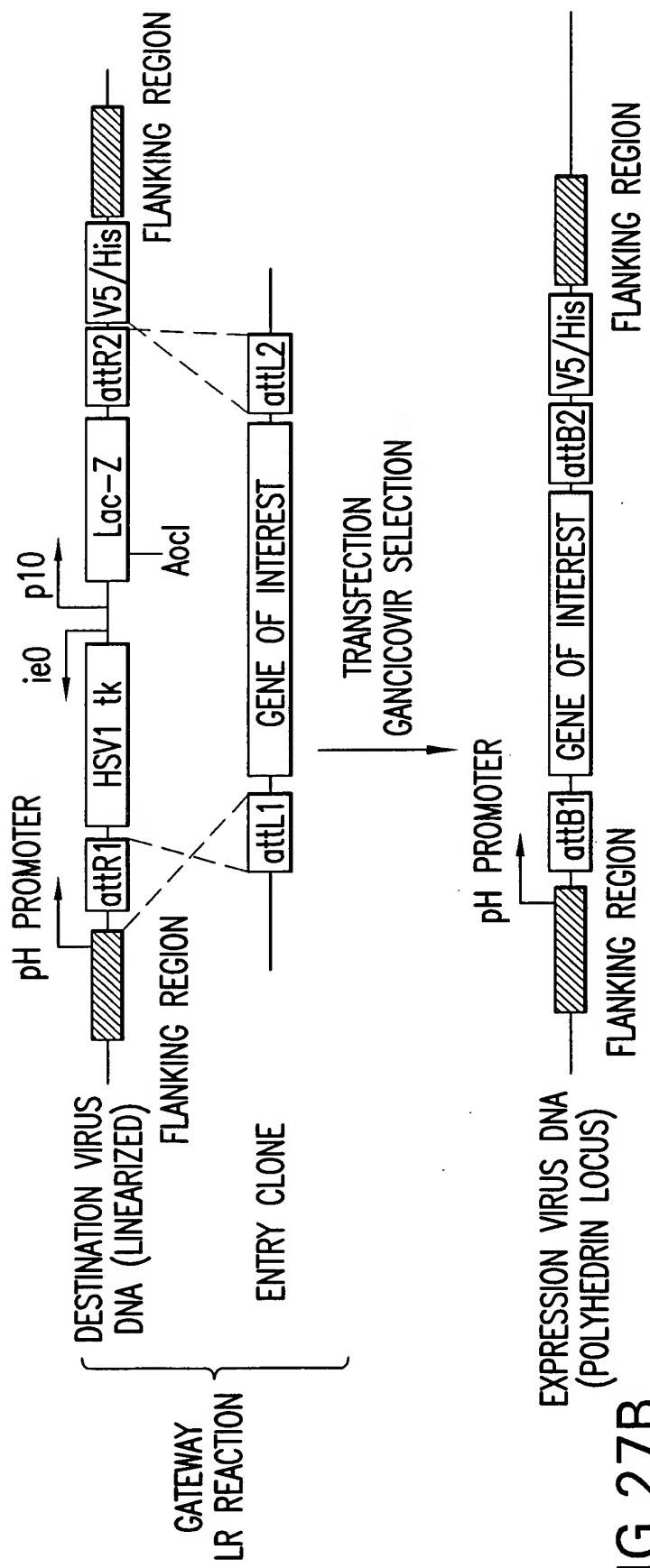


FIG. 27 B

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HTP PROTOCOL FOR USE WITH BACULODIRECT^(TM)

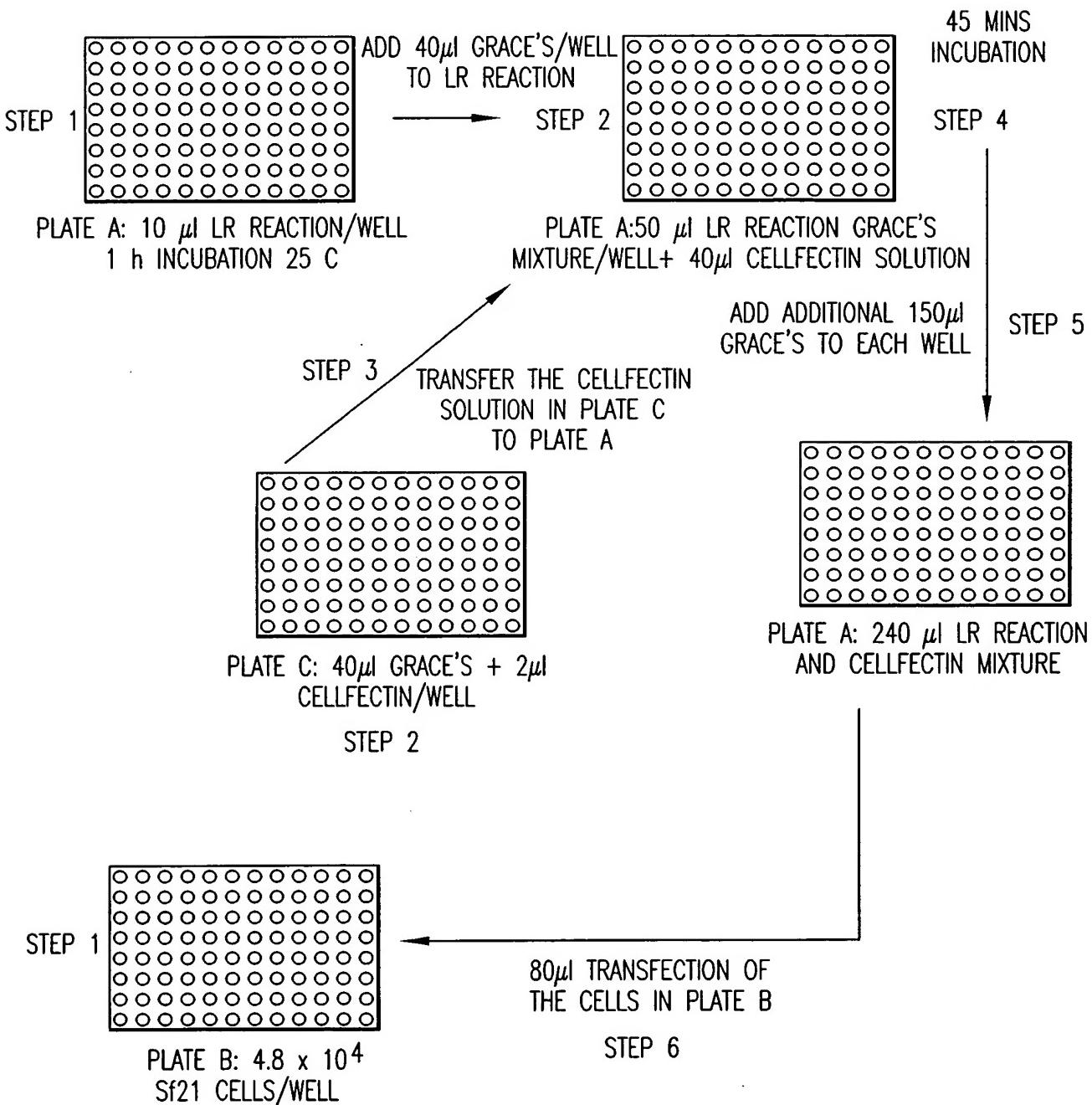


FIG.28

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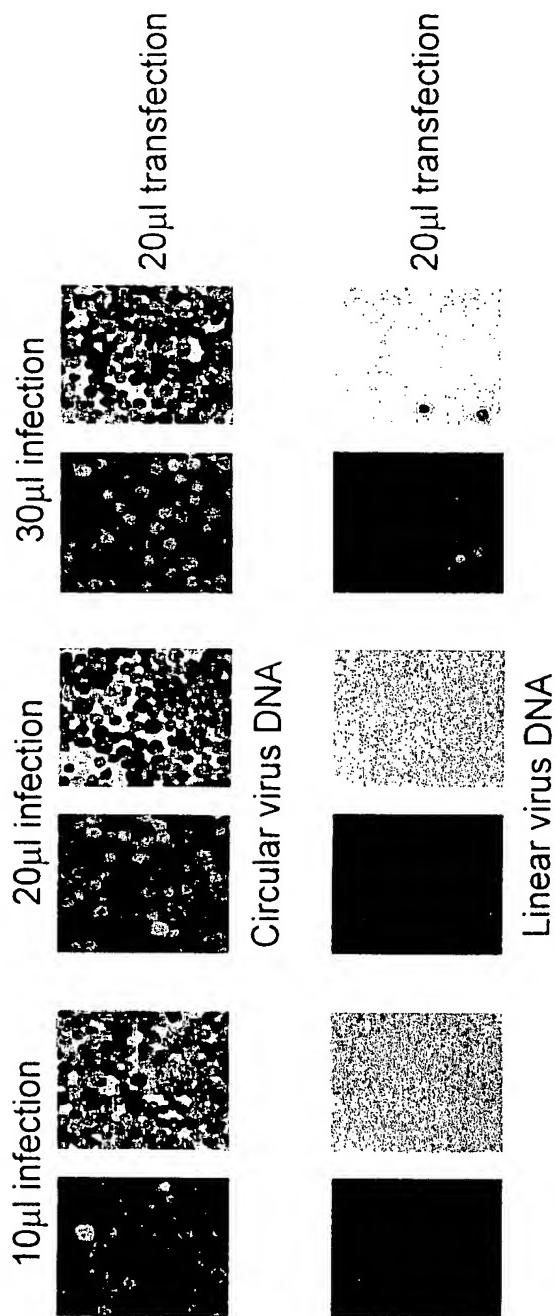


FIG. 2.9

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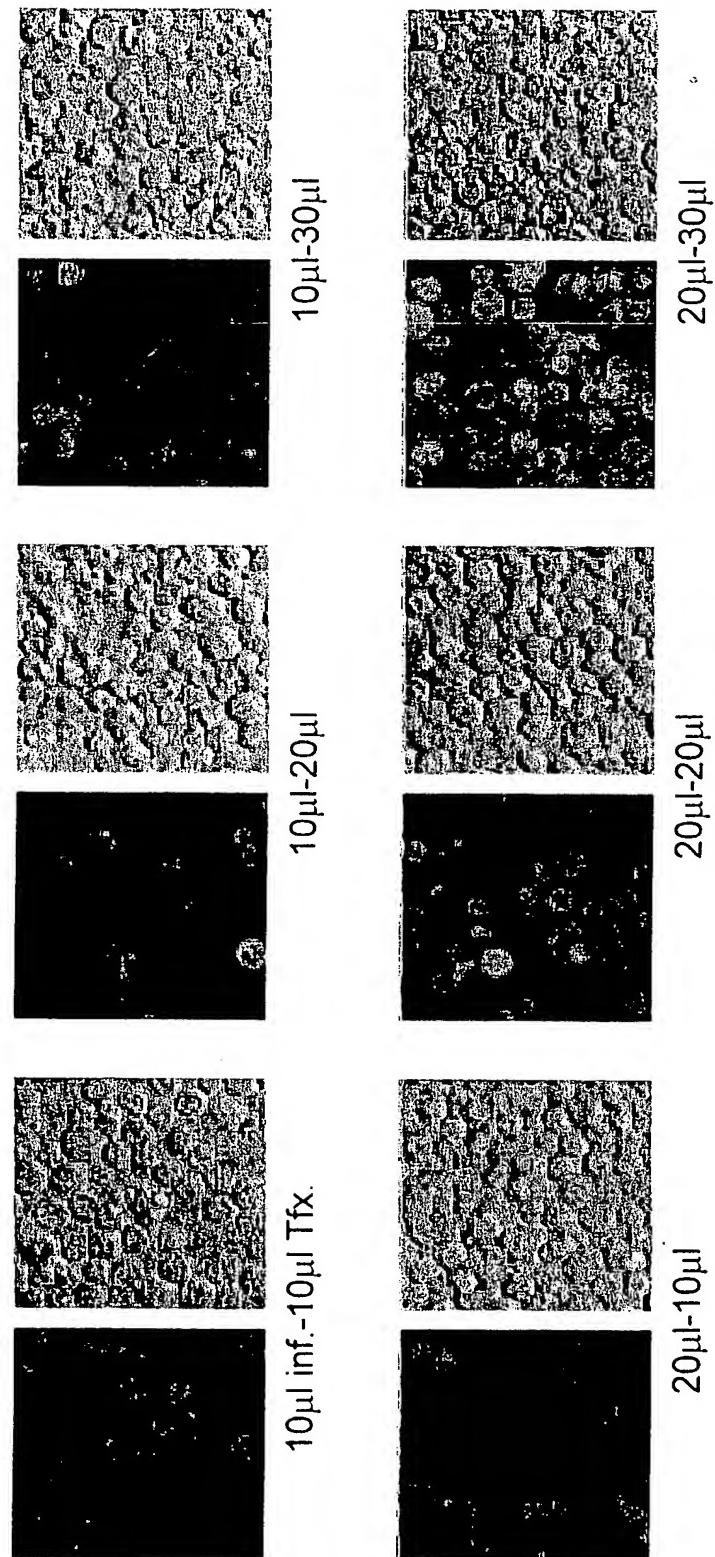


FIG. 30

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CATGUS LACZ CAL APO

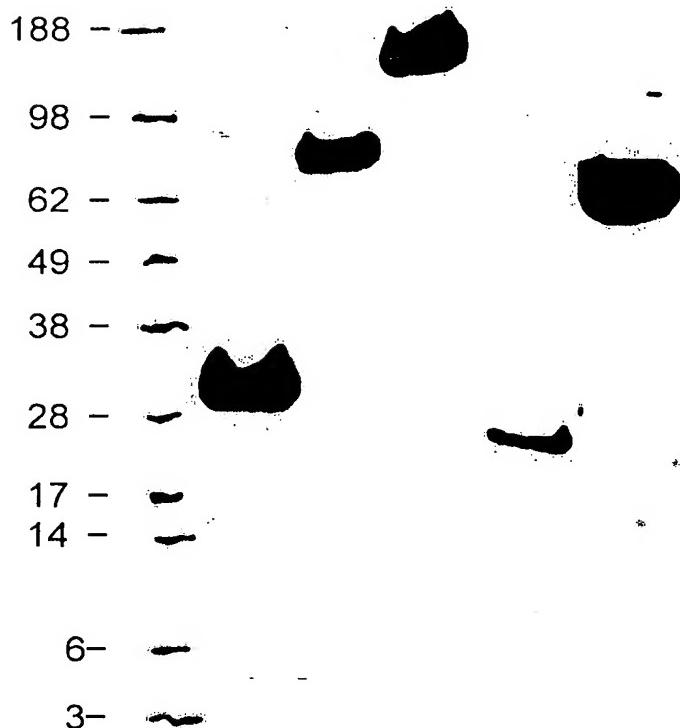


FIG.31

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VIRUS	TITER pfu/ml	TRANSFECT	INFECT
BACULODIRECT™	9.8×10^6	6.9×10^8	
BAC TO BAC	6.9×10^6	7.2×10^8	
MAXBAC	N/A		3.6×10^8

TITER COMPARISON OF THE THREE VIRUSES BY USING TCID₅₀

VIRUS	TITER pfu/ml	TRANSFECT	INFECT.
BACULODIRECT™	6×10^6		3×10^8
BAC TO BAC	8×10^6		5×10^8
MAXBAC	N/A		3×10^8

TITER COMPARISON OF THE THREE VIRUSES BY USING PLAQUE ASSAY

FIG.32

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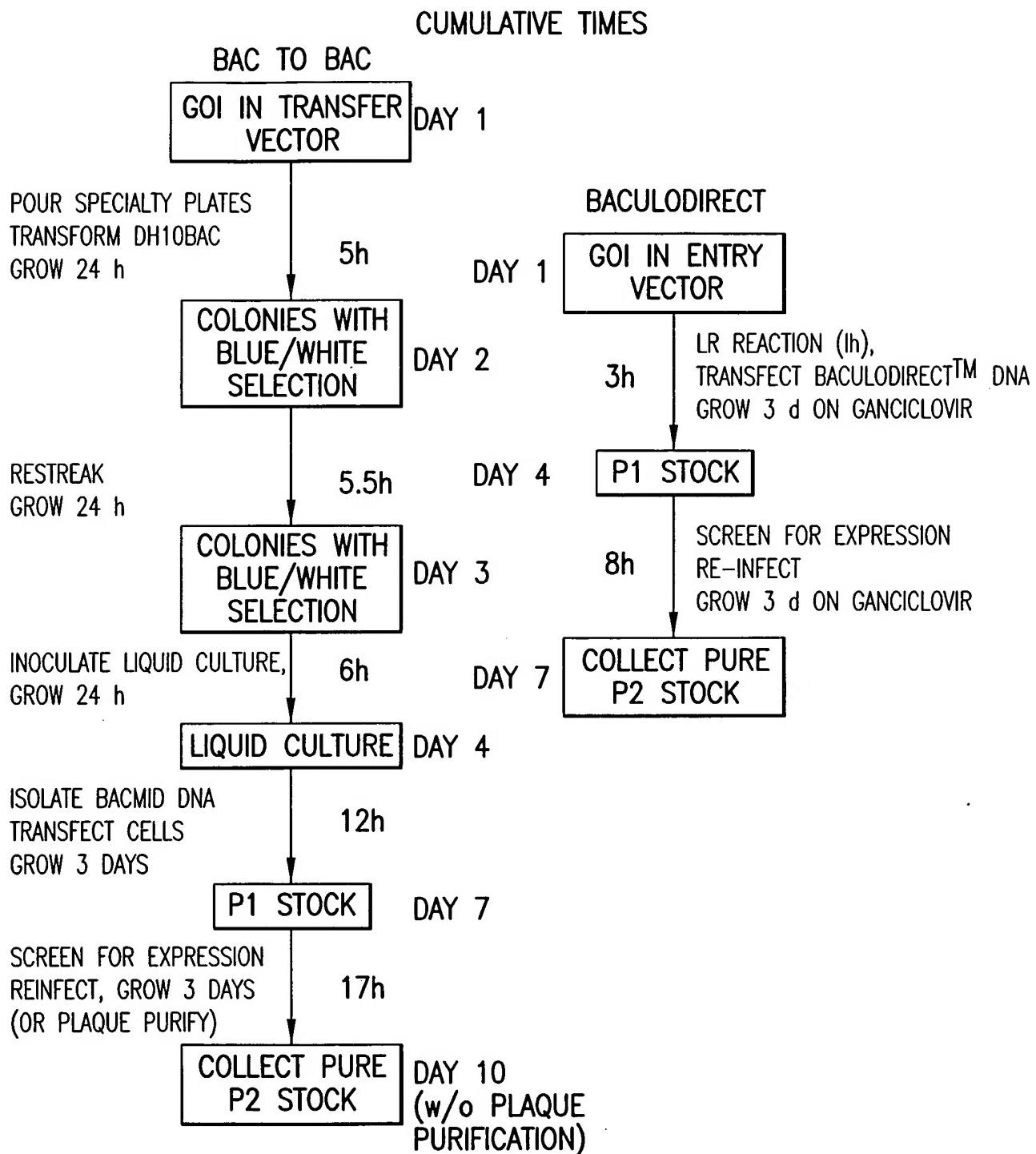


FIG.33

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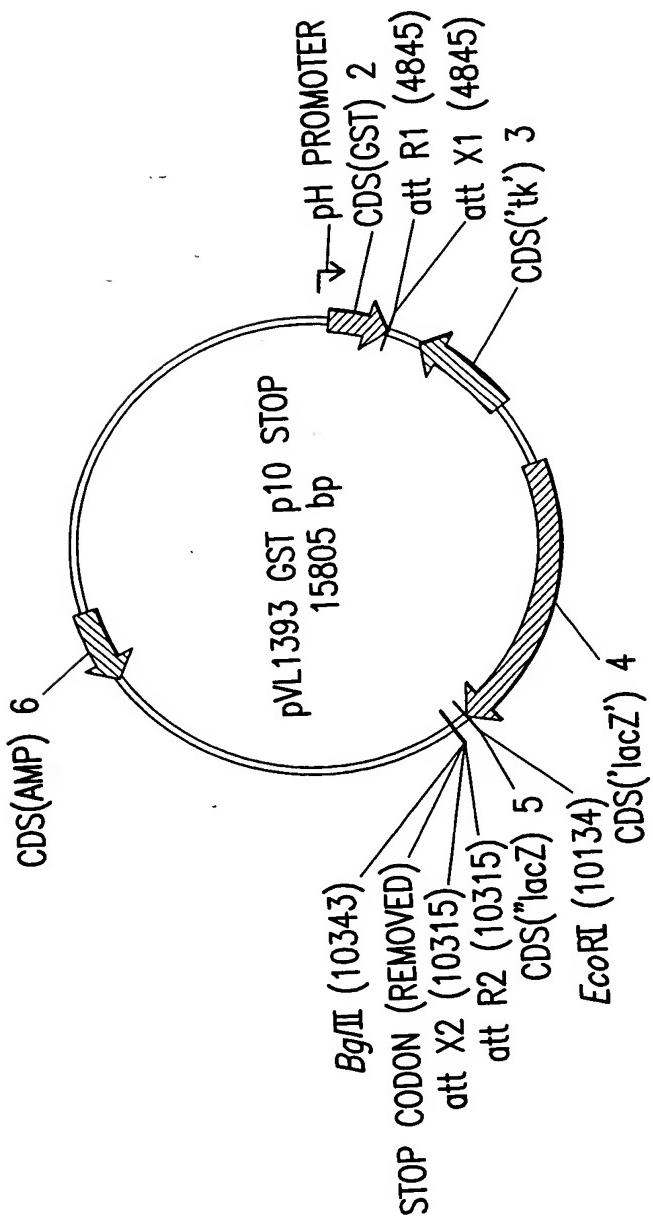


FIG. 34

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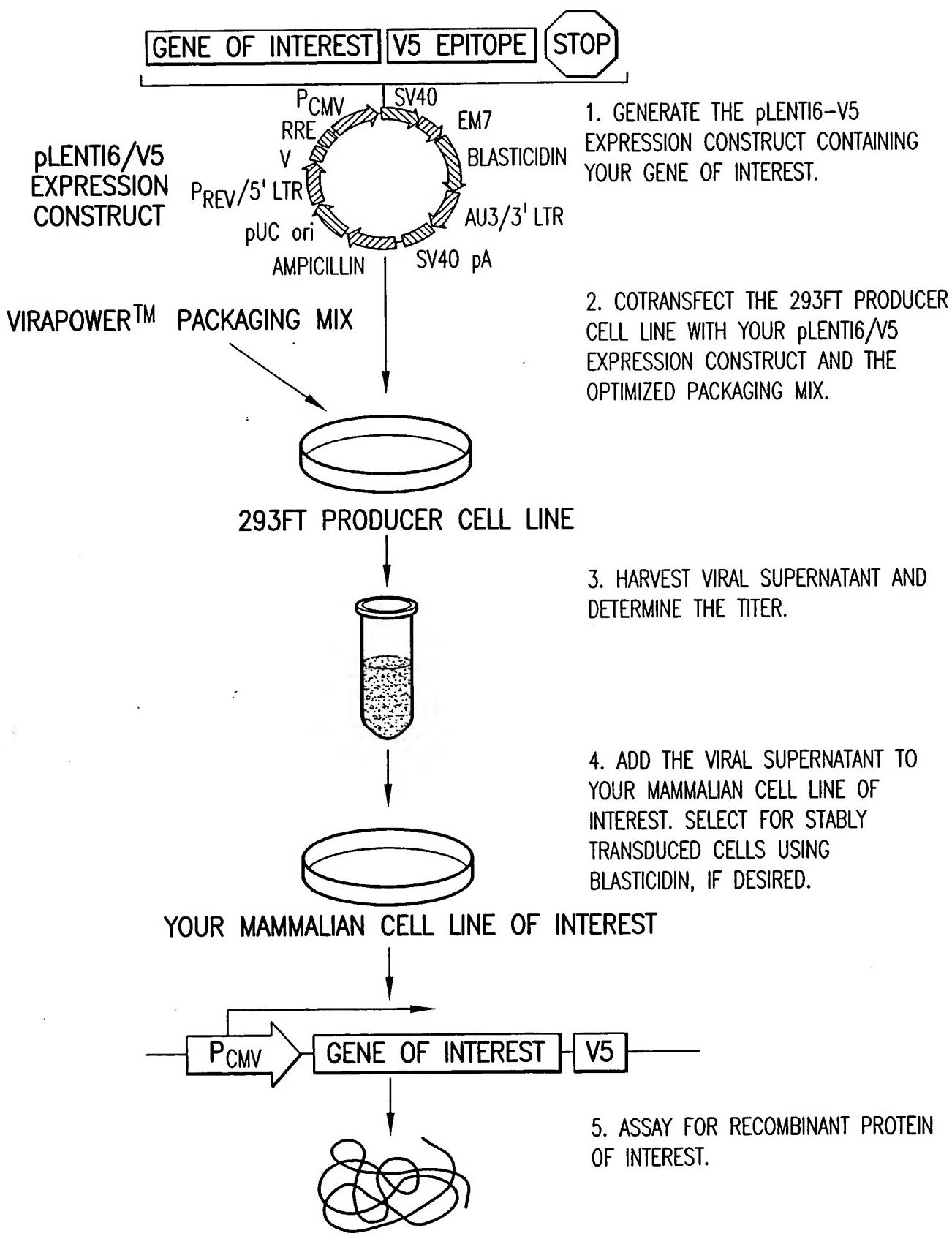


FIG.35

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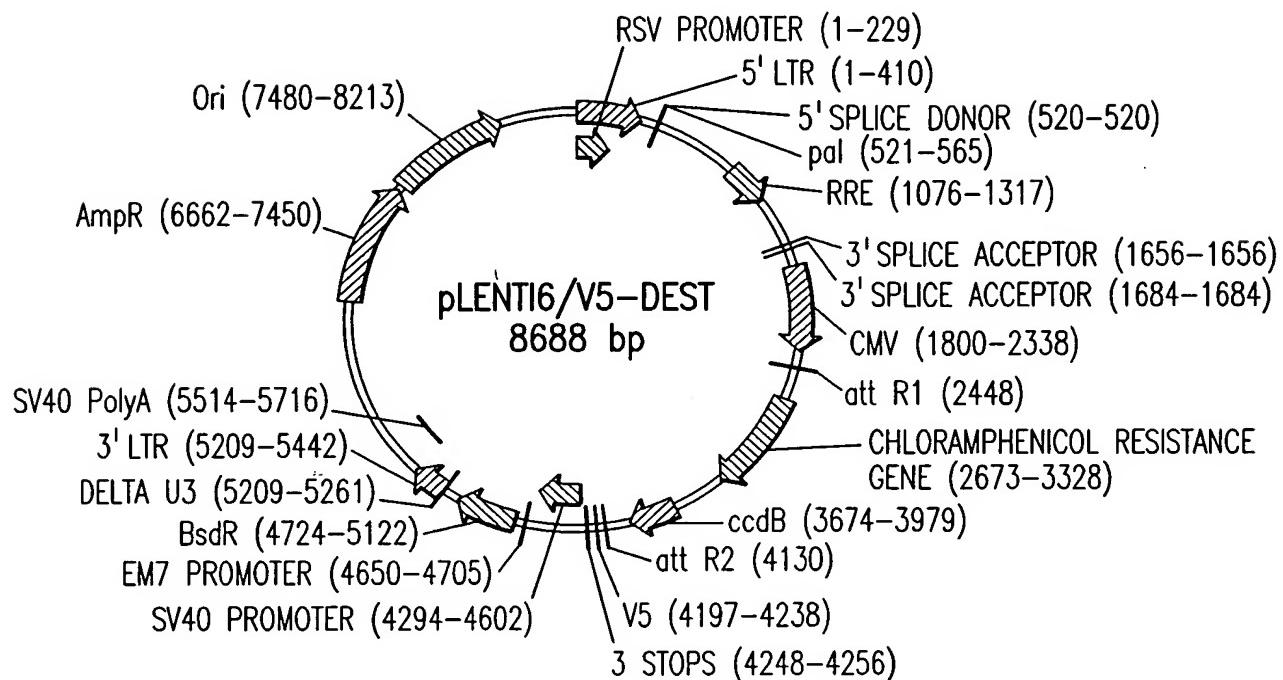


FIG.36A

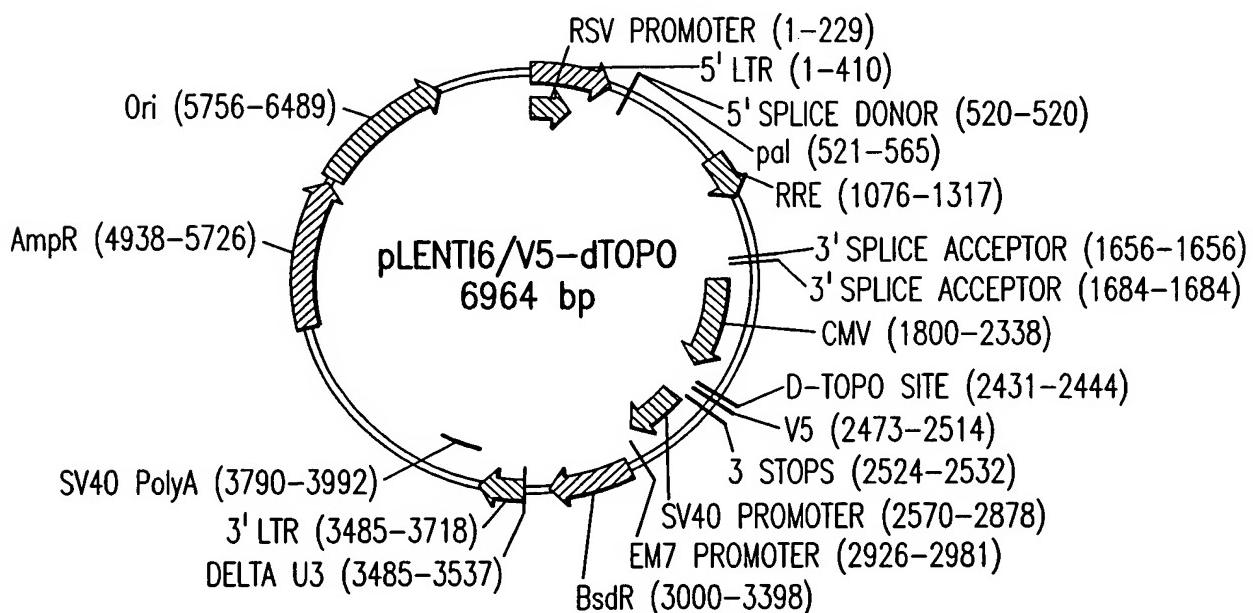


FIG.36B

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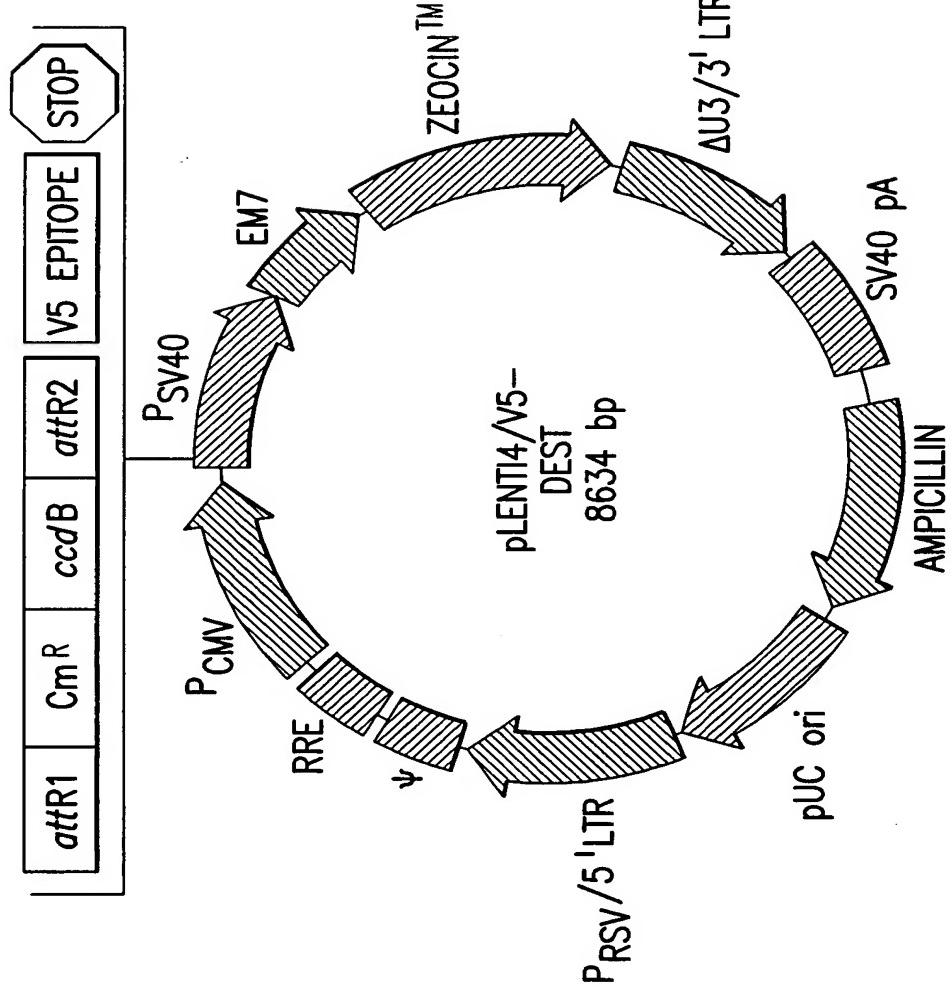


FIG. 36C

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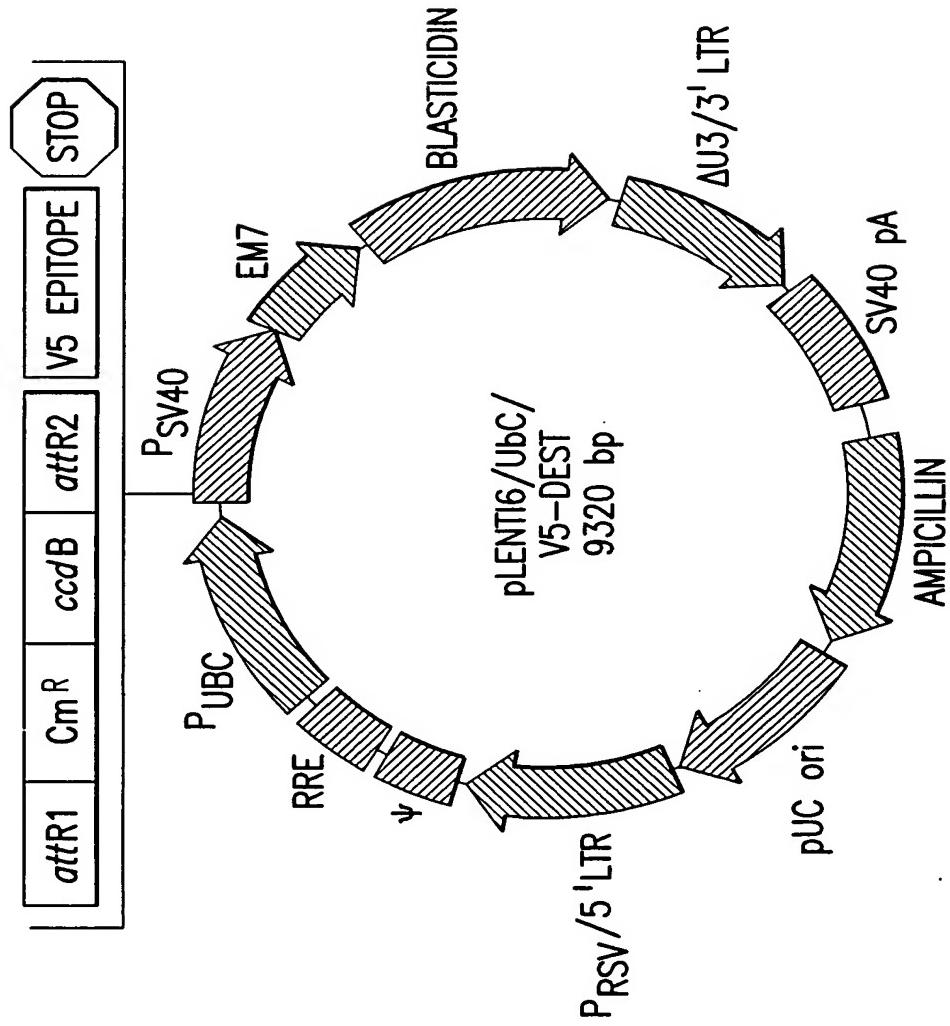


FIG. 36D

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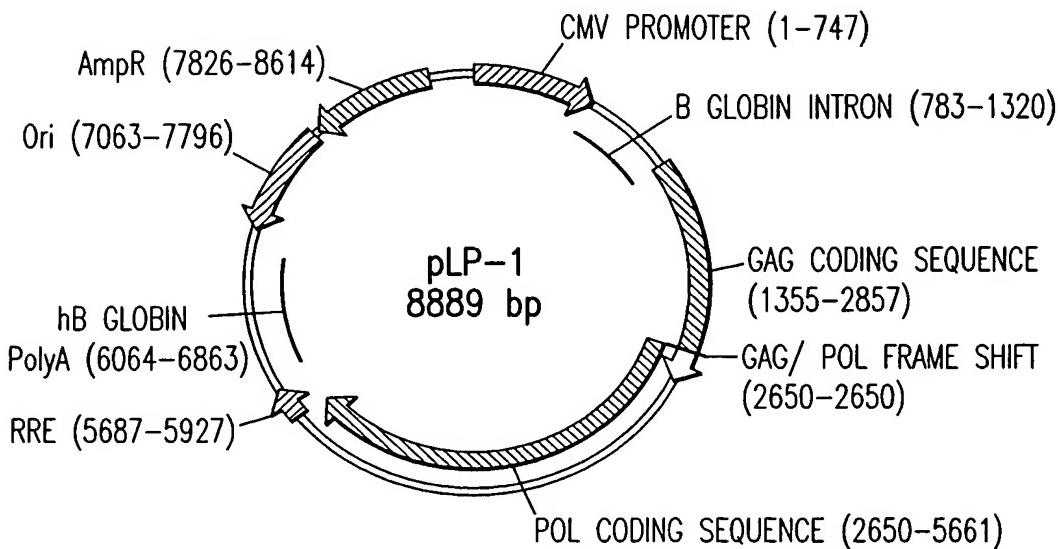


FIG. 37A

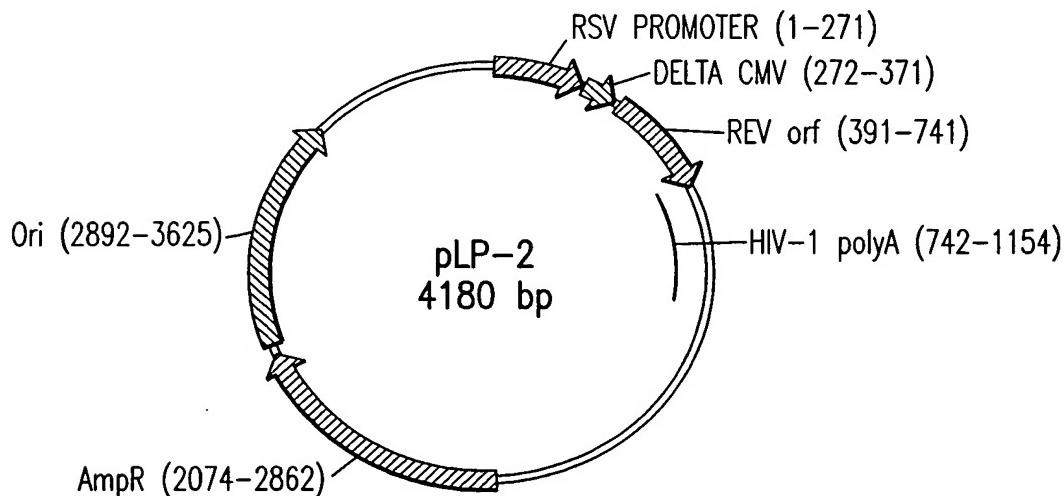


FIG. 37B

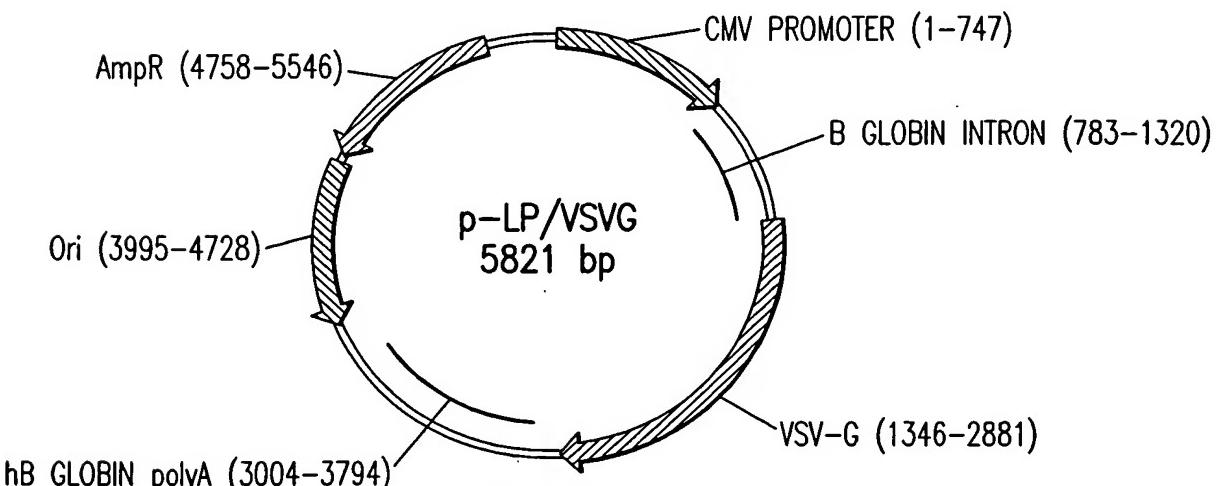


FIG. 37C

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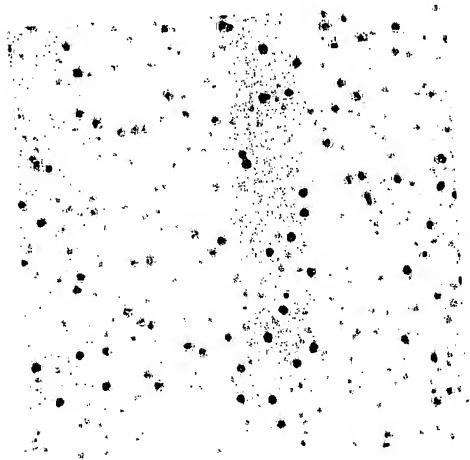


FIG.38A

LR REACTION [Bsd] IN PLATE	DEST ALONE	DEST + CAT
NO Bsd	24	320^1 $(12/24 = 50\%)^2$
50 μ g/ml Bsd	0	162 $(24/24 = 100\%)^2$

¹SEE PHOTO ABOVE

²PERCENTAGE OF CORRECT COLONIES

FIG.38B

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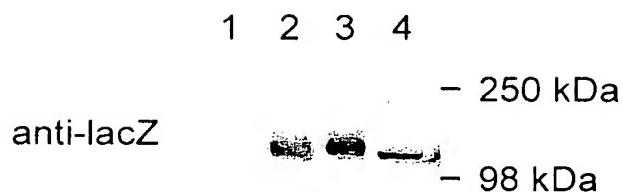


FIG. 39A

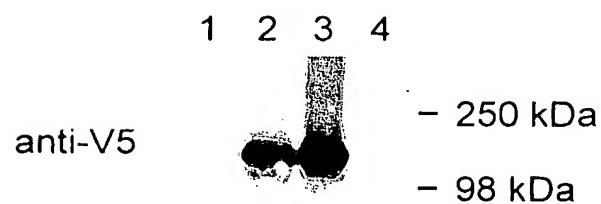


FIG. 39B

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EXAMPLES OF PRODUCTION TITERS (Bsd^R cfu/ml)

	EMPTY	LacZ	GFP	CAT	PKC
EXP 1	6 x 10 ⁶	5 x 10 ⁵	4 x 10 ⁶	N.D.	N.D.
EXP 2	3 x 10 ⁷	3 x 10 ⁵	6 x 10 ⁶	8 x 10 ⁶	N.D.
EXP 3	7 x 10 ⁶	6 x 10 ⁵	2 x 10 ⁶	1 x 10 ⁷	3 x 10 ⁶
Avg	1.4 x 10 ⁷	4.7 x 10 ⁵	4 x 10 ⁶	9 x 10 ⁶	3 x 10 ⁶

N.D. = NOT DETERMINED

FIG. 40

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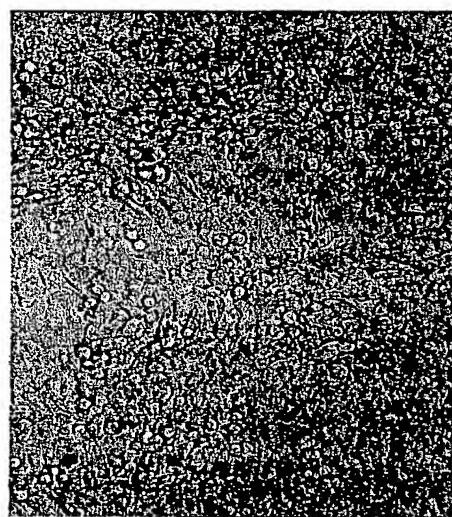
pLenti6/V5-dT/GFP



Fluorescent

FIG.41C

pLenti6/V5-dT/GFP



Brightfield

FIG.41B

pLenti6/V5-GW/lacZ

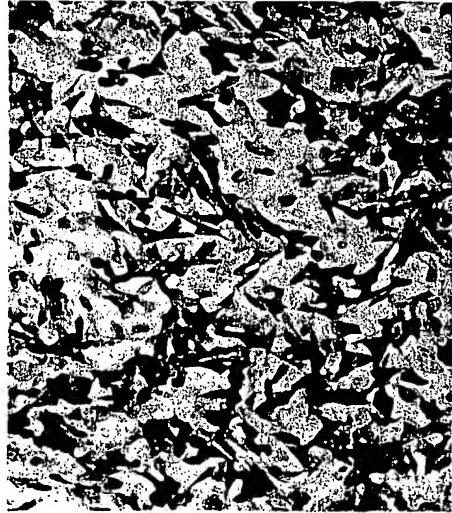


FIG.41A

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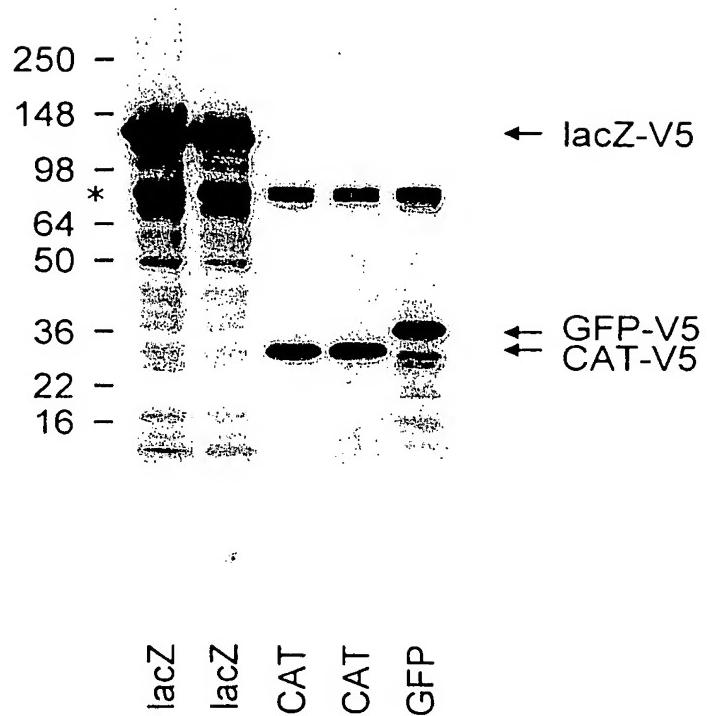


FIG.42A

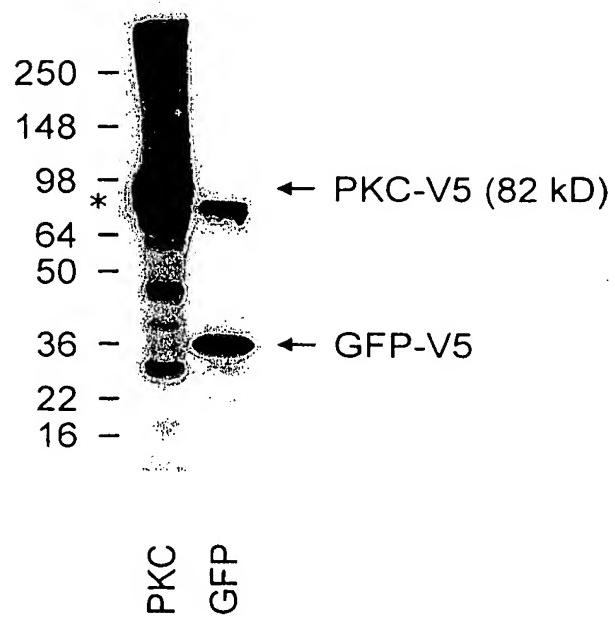


FIG.42B

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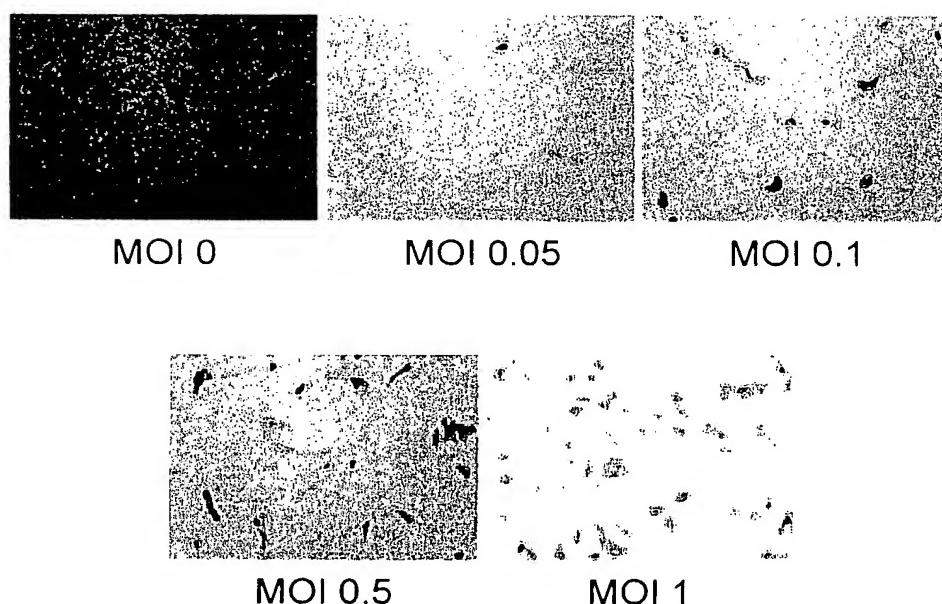


FIG.43A

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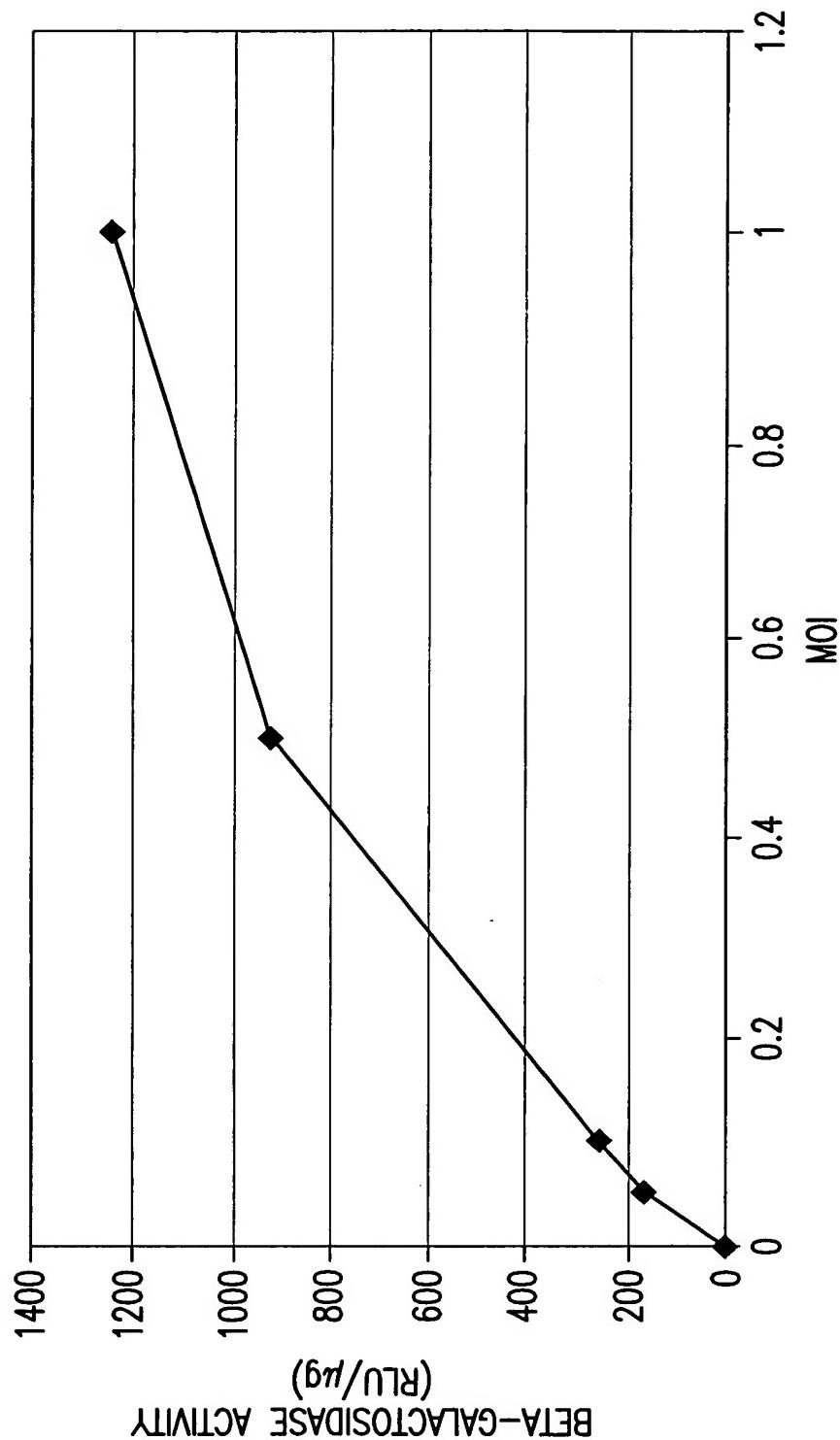


FIG. 43B

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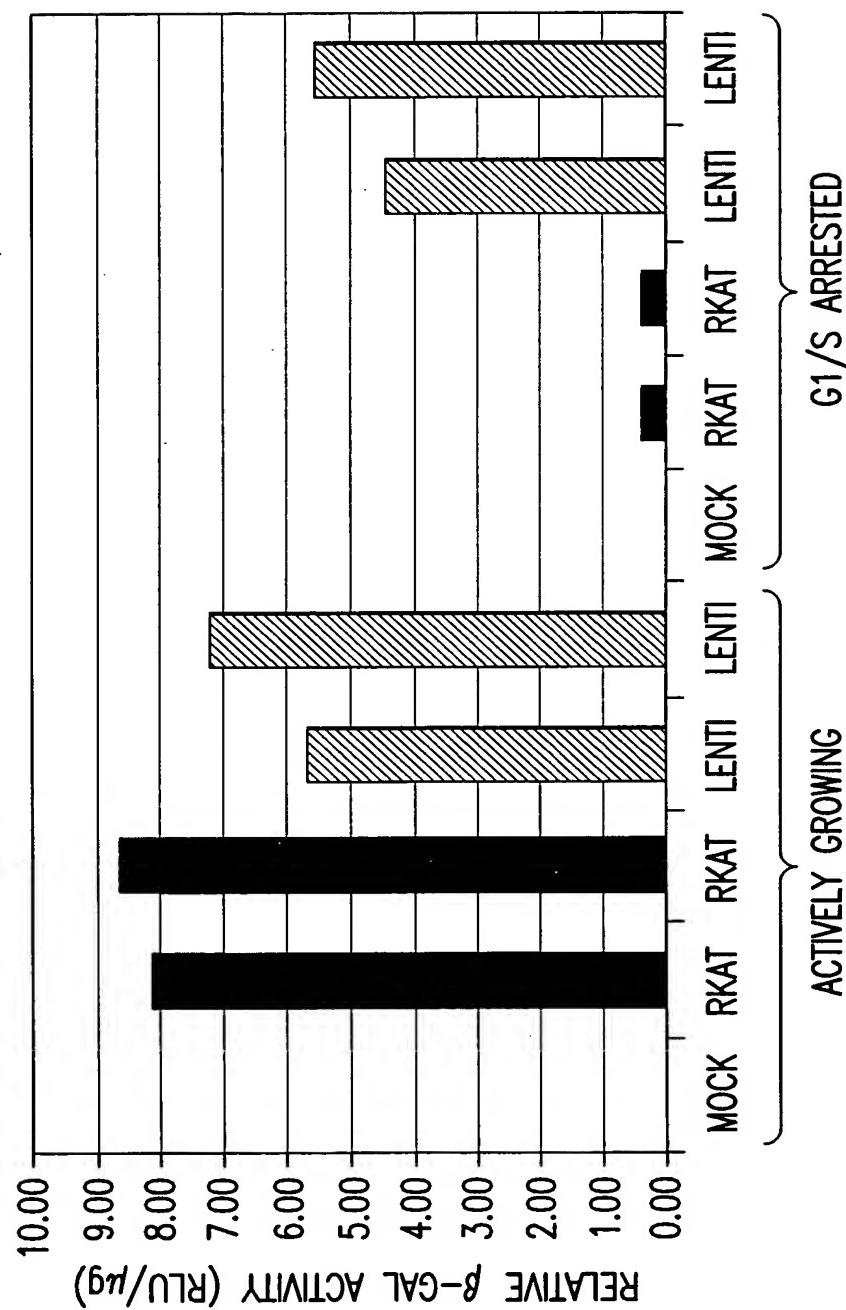
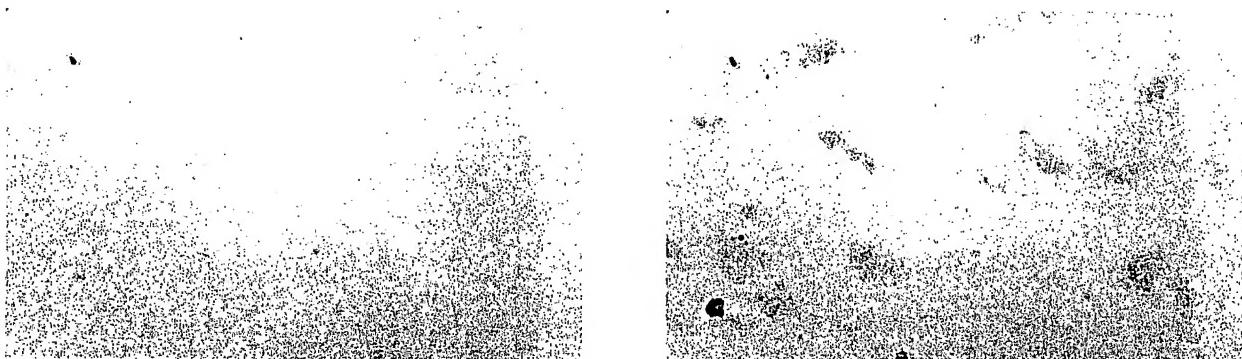


FIG. 44A

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rKAT6-lacZ retrovirus

pLenti6/V5-GW/lacZ

FIG.44B

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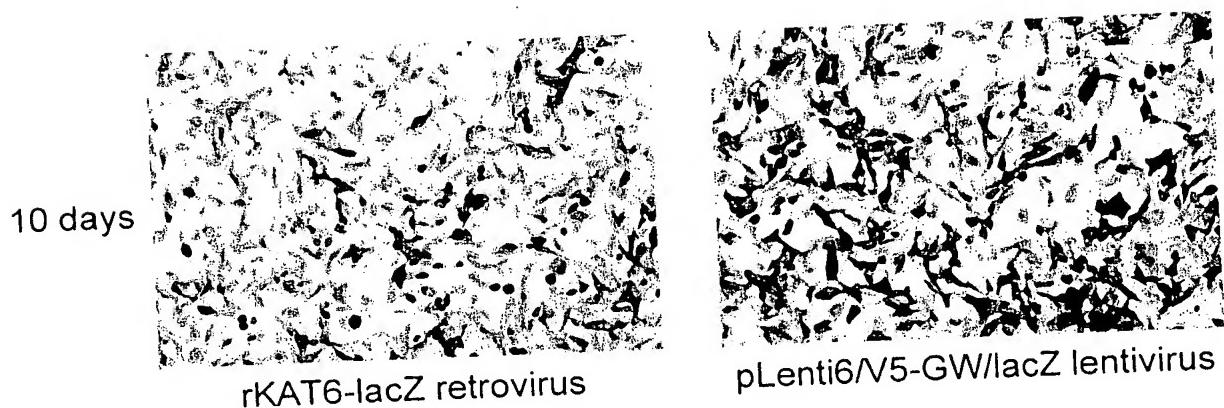


FIG.45A

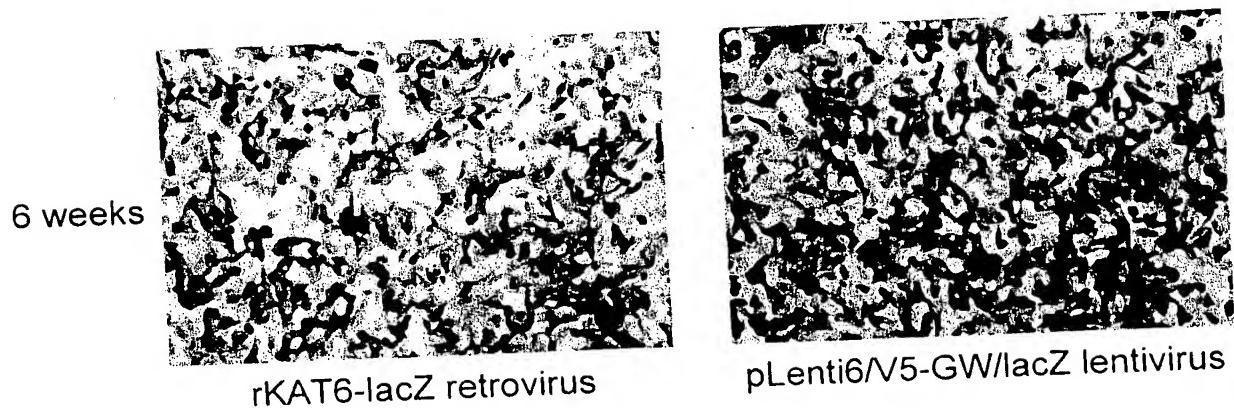


FIG.45B

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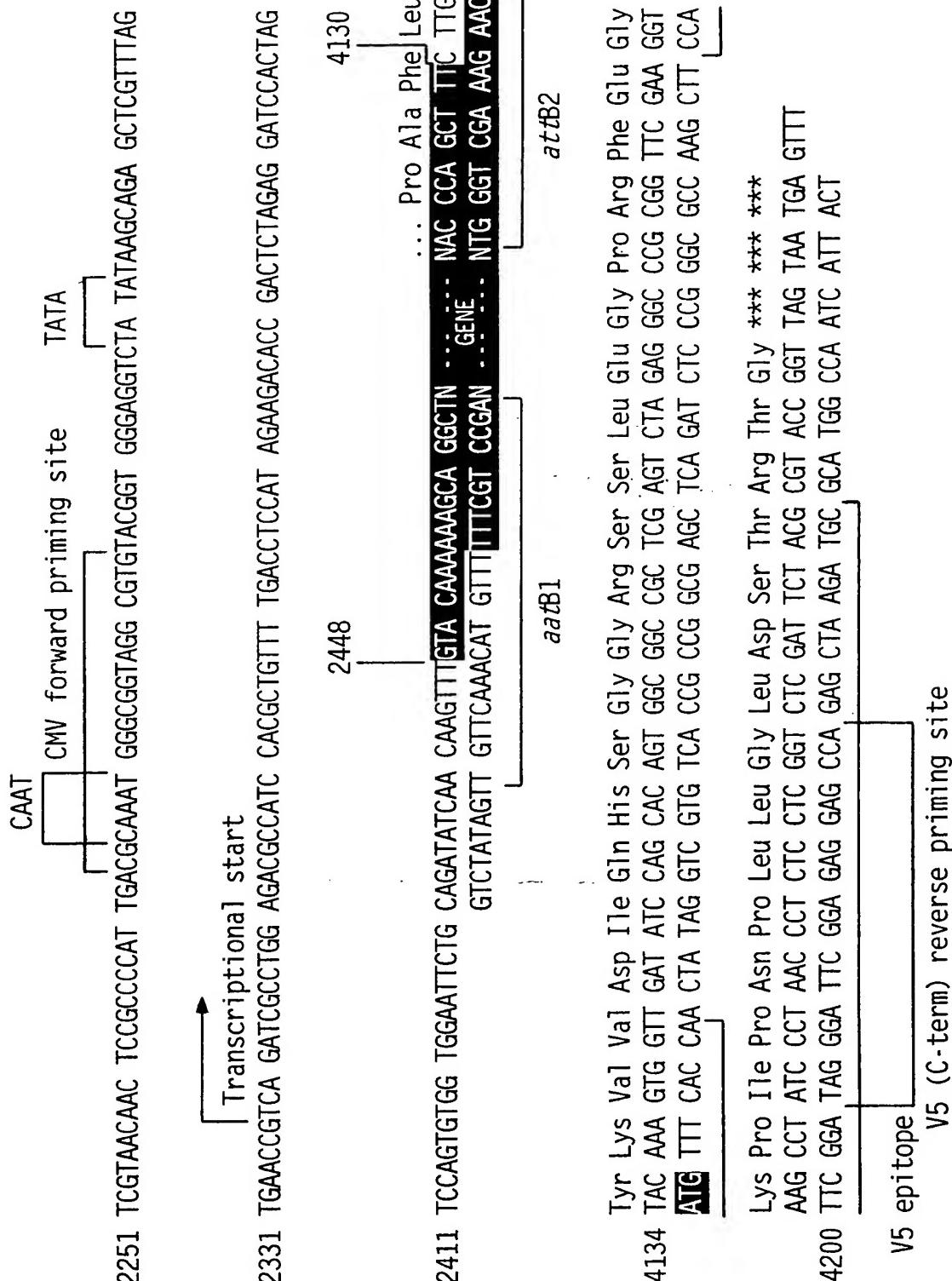


FIG. 46A

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UB forward priming site

The diagram shows the amino acid sequence from residue 2881 to 4829. A bracket labeled 'UB forward priming site' spans from residue 2881 to 3079. Another bracket labeled 'V5 (C-term) reverse priming site' spans from residue 4762 to 4829. The V5 epitope is highlighted in a black box from residue 4763 to 4829. The sequence is as follows:

```

    2881 TTGGCGAGTG TGTGTTGTGA AGTTGGTAG GCACCTTTG AAATGTAATC ATTTGGGTCA ATATGTAATT TTCAGTGTAA
    2961 GACTAGTAAA TTGTCGGCTA AATTCTGGCC GTTTTTGGCT TTTTTGGTAG ACCAAGCTTG GTACCGAGCT CGGATCCACT
    3079 Leu Tyr Lys Val Val Asp Ile Gln His Ser Gly Arg Ser Leu Glu Gly Pro Arg Phe Glu
    3041 AGTCCAGTGT GGTTGAATT TGCGAGATATC ACAAAAGTTG TACAAAAAG CAGGCTN ... GENE ... NAC CCA GCT TTC GAA
    4762 AAC ATG TTT CAC CAA CTA TAG GTC GTG TCA CCG CCG AGC TCA GAT CTC CCG GGC GCC AAG CTT
    4763 TTG TAC AAA GTG GTT GAT ATC CAG CAC AGT GGC GGC CGC TCG AGT CTA GAG GGC CCG CTT
    AAC ATG TTT CAC CAA CTA TAG GTC GTG TCA CCG CCG AGC TCA GAT CTC CCG GGC GCC AAG CTT
    4829 GGT AAG CCT ATC AAC CCT CTC CTC GGT CTC GAT TCT ACG CGT ACC GGT TAG TAA TGA GTTT
    CCA TTC GGA TAG GGA TTC GGA GAG GAG CCA GAG CTA AGA TGC GCA TGG CCA
  
```

atdB2

aatB1

*** *** ***

V5 epitope

V5 (C-term) reverse priming site

FIG. 46B

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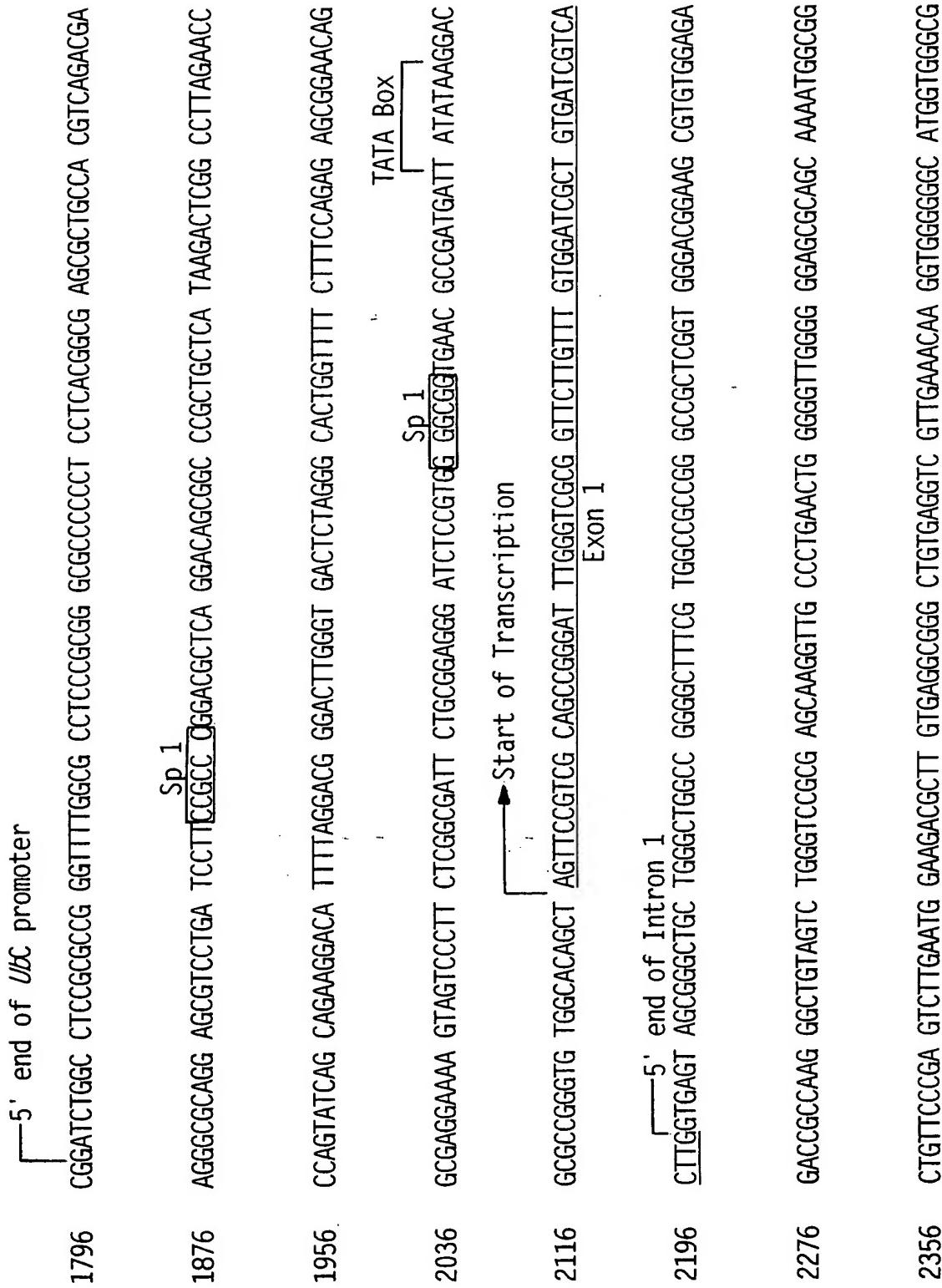


FIG.46C

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2436	GCAAGAACCC AAGGTCTTGA GGCCCTTGCT AATGCCGGAA AGCTCTTATT CGGGTGAGAT GGGCTGGGGC ACCATCTGGG
2516	GACCCTGACG TGAAGTTTGT CACTGACTGG AGAACTCGGT TTGTCGTCTG TTGCGGGGC GGCAGTTATG CGGTGCCGTT
2596	GGGCAGTGCA CCCGTACCTT TGGGAGCGCG CGCCCTCGTC GTGTCGTGAC GTCACCCGTT CTGTTGGCTT ATAATGCCAGG
2676	GTGGGGCCAC CTGCCGGTAG GTGTGCCGTA GGCTTTCTC CGTCCAGGA CGCAGGGTTC GGGCCTAGGG TAGGCTCTCC
2756	TGAATCGACA GGCGCCGAC CTCTGGTGAG GGGAGGGATA AGTGGGGCT CAGTTCTT TTGTCGGTTT ATGTACCTAT
2836	CTTCTTAAGT AGCTGAAGCT CCGGGTTTGA ACTATGGCT CGGGTTGGC GAGTGTGTTT TGTAAGTTT TTTAGGCACC
2916	TTTGAAATG TAATCATTG GGTCAAATATG TAATTTCAAG TGTAGACTA GTAAATTGTC CGCTAAATTC TGCCCGTTTT
2996	3' end of Intron 1 <u>GTTAGACGAA GCTTGG</u> ... 5' end of Exon 2

FIG. 46D

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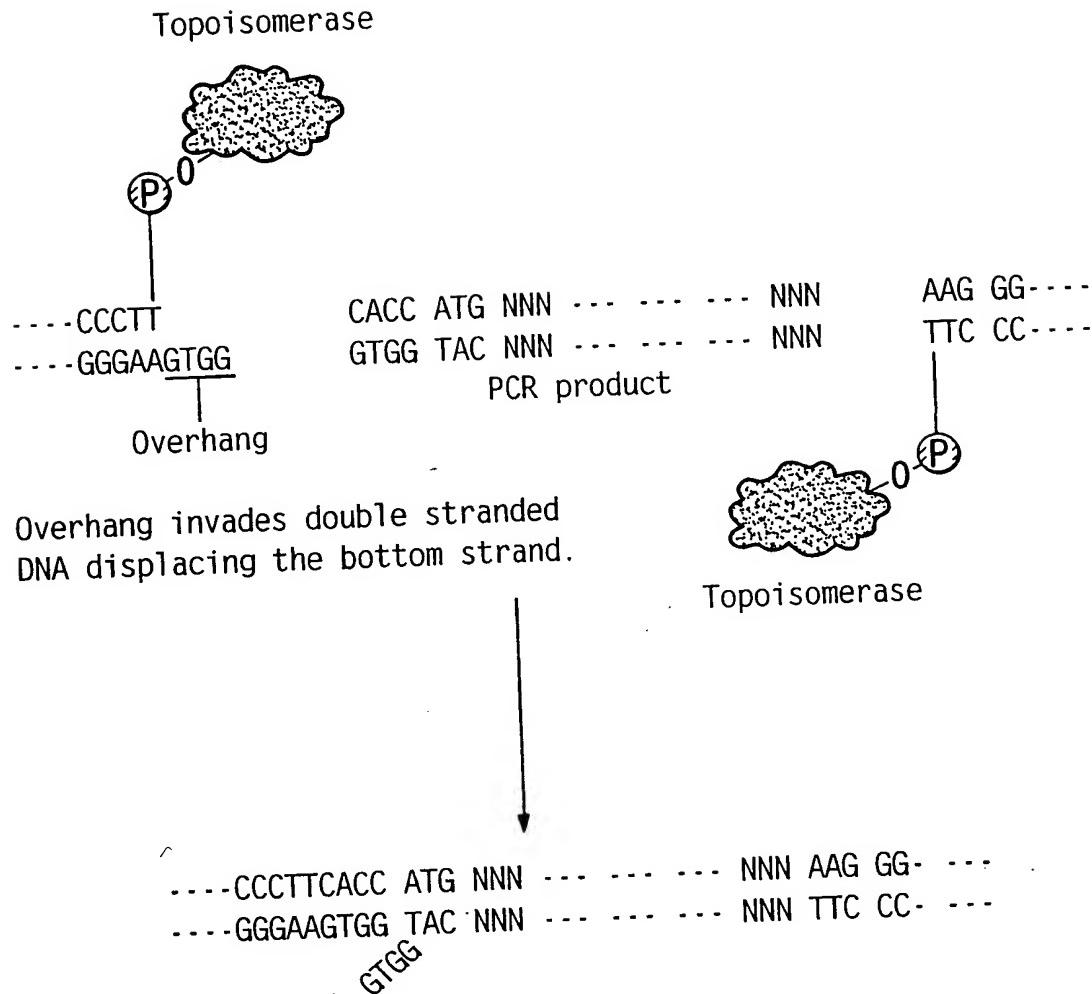


FIG.47

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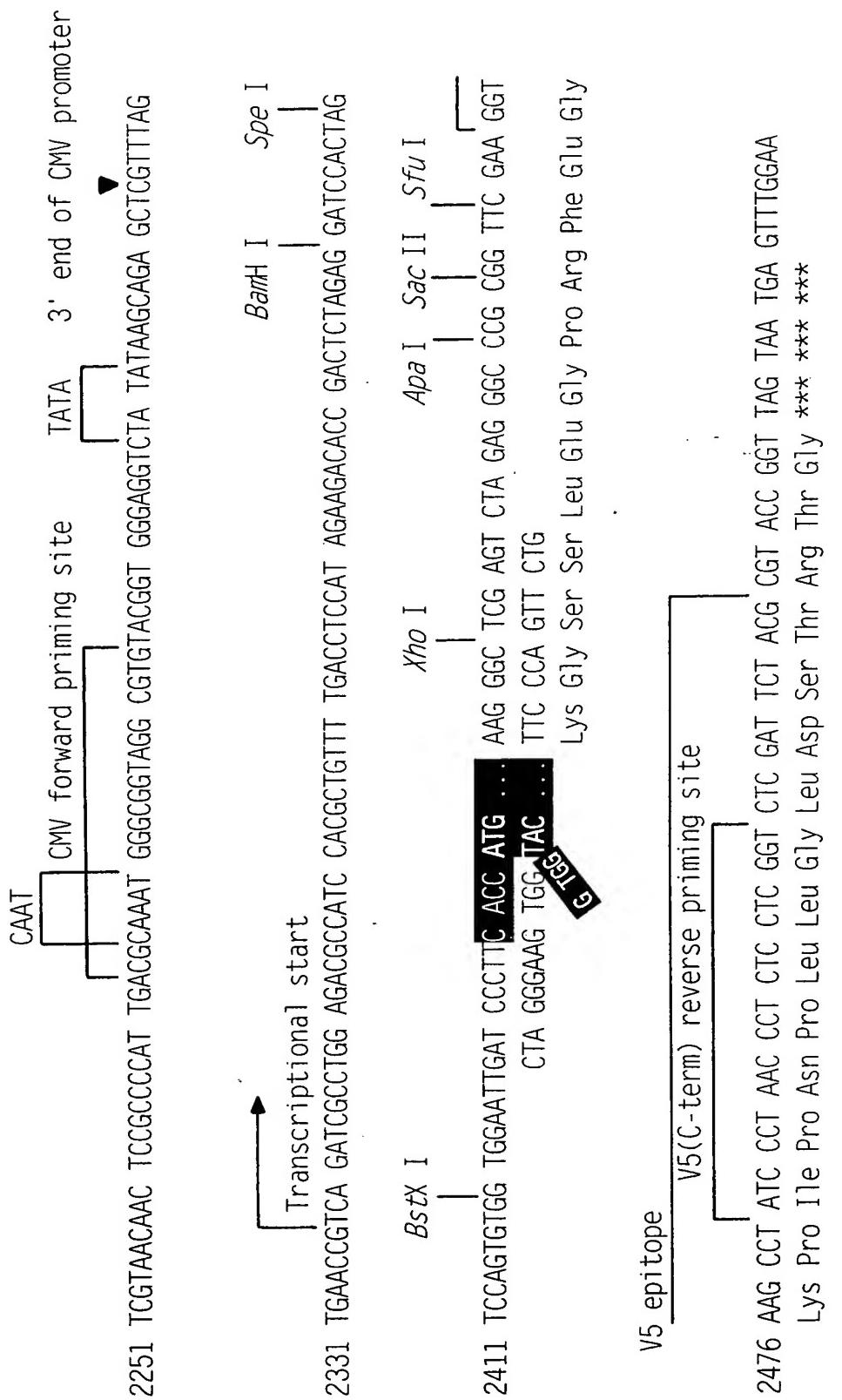


FIG.48

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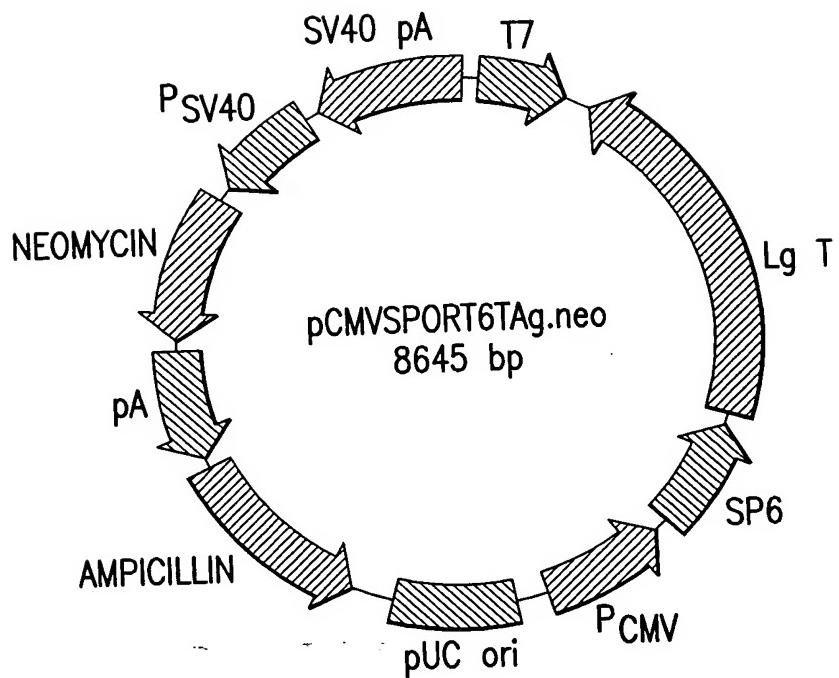


FIG. 49

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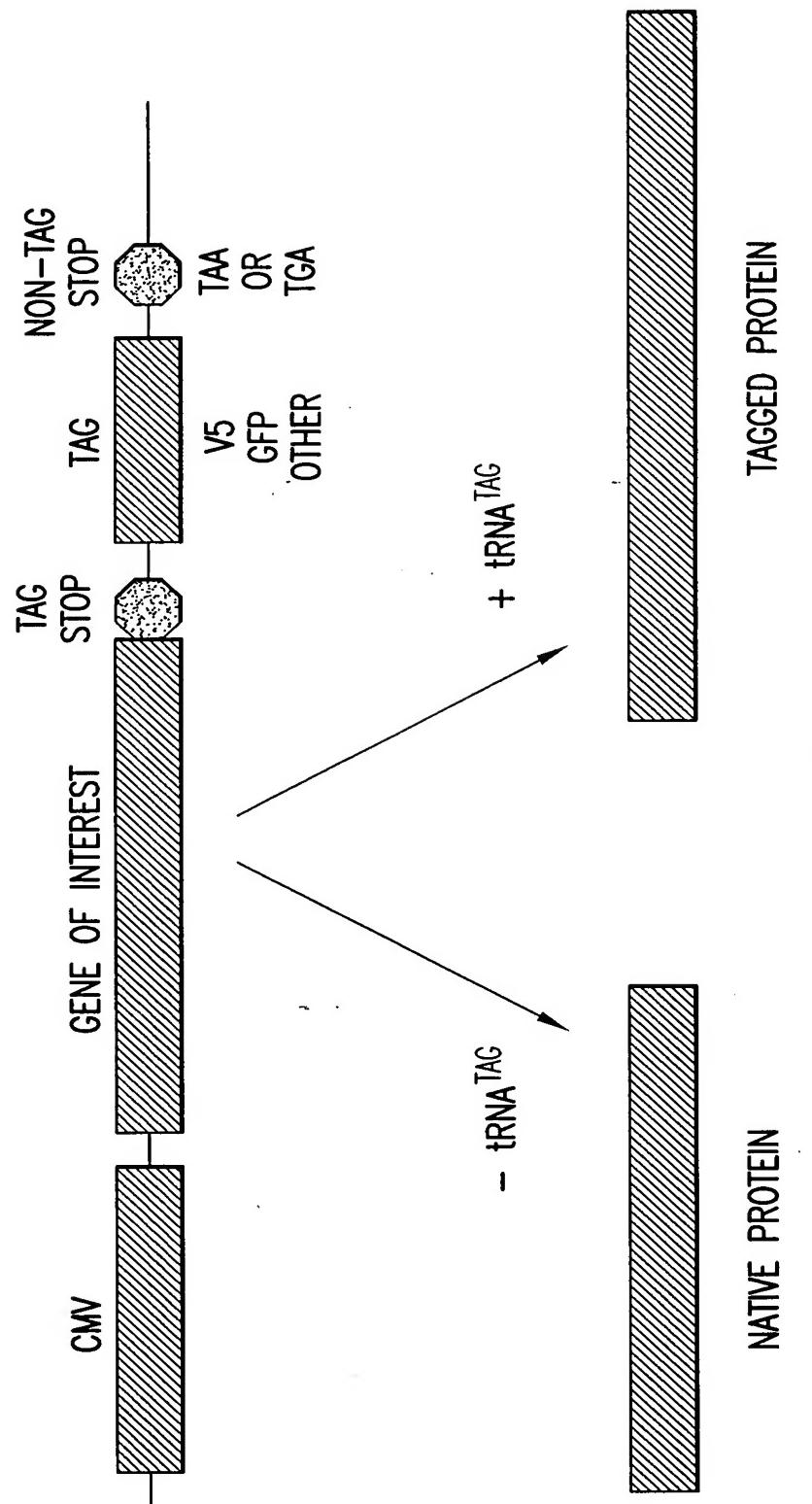


FIG. 50

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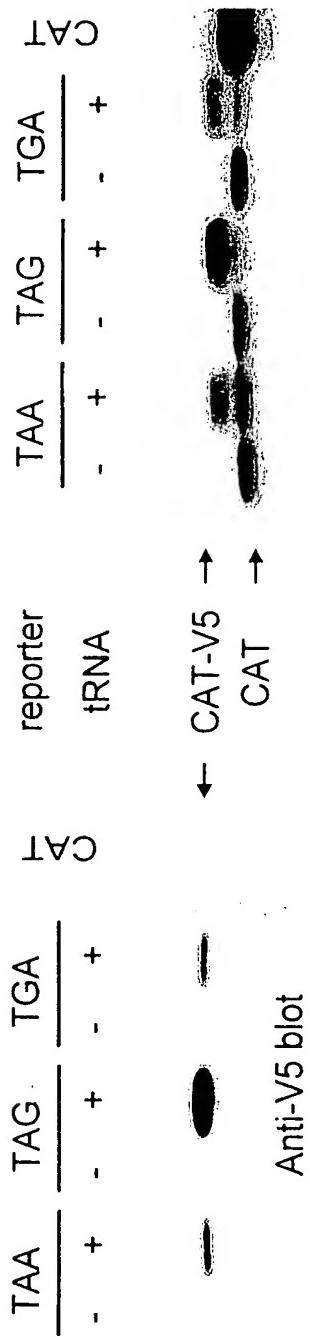


FIG. 51 A

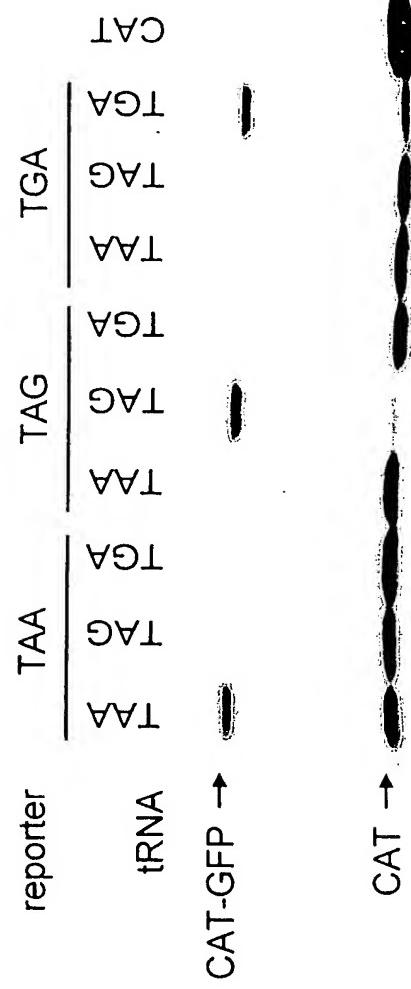
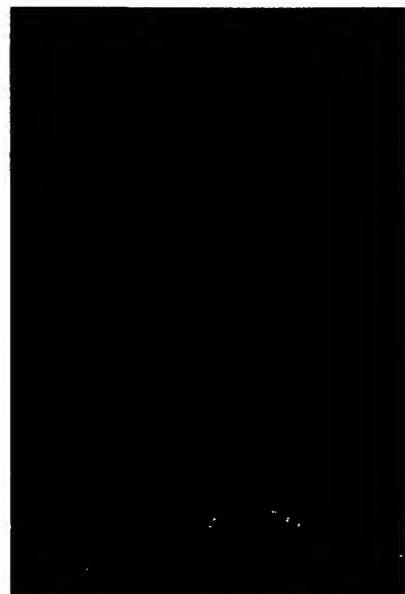
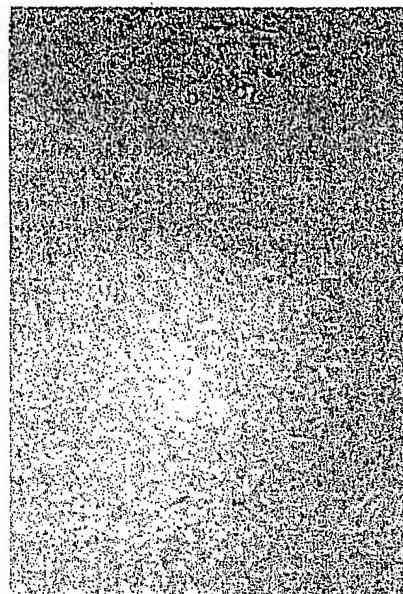
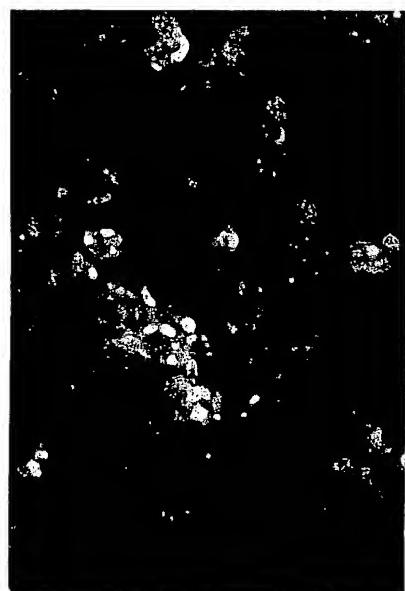
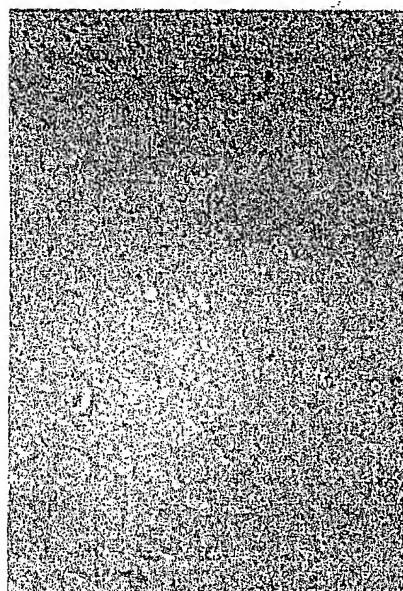


FIG. 51 B

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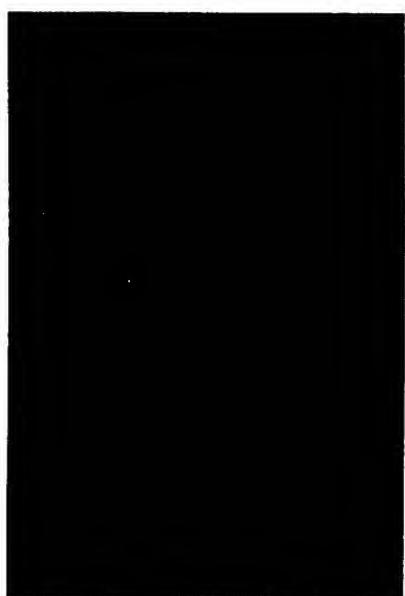
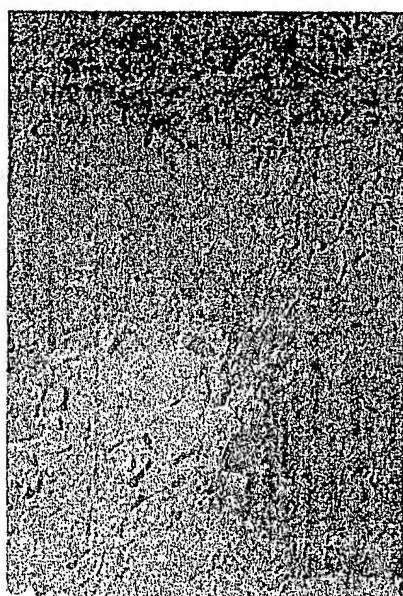


tRNA TGA



tRNA TAG

pcDNA3.1 lacZ-stop^{TAG}-GFP



tRNA TAA

FIG. 52

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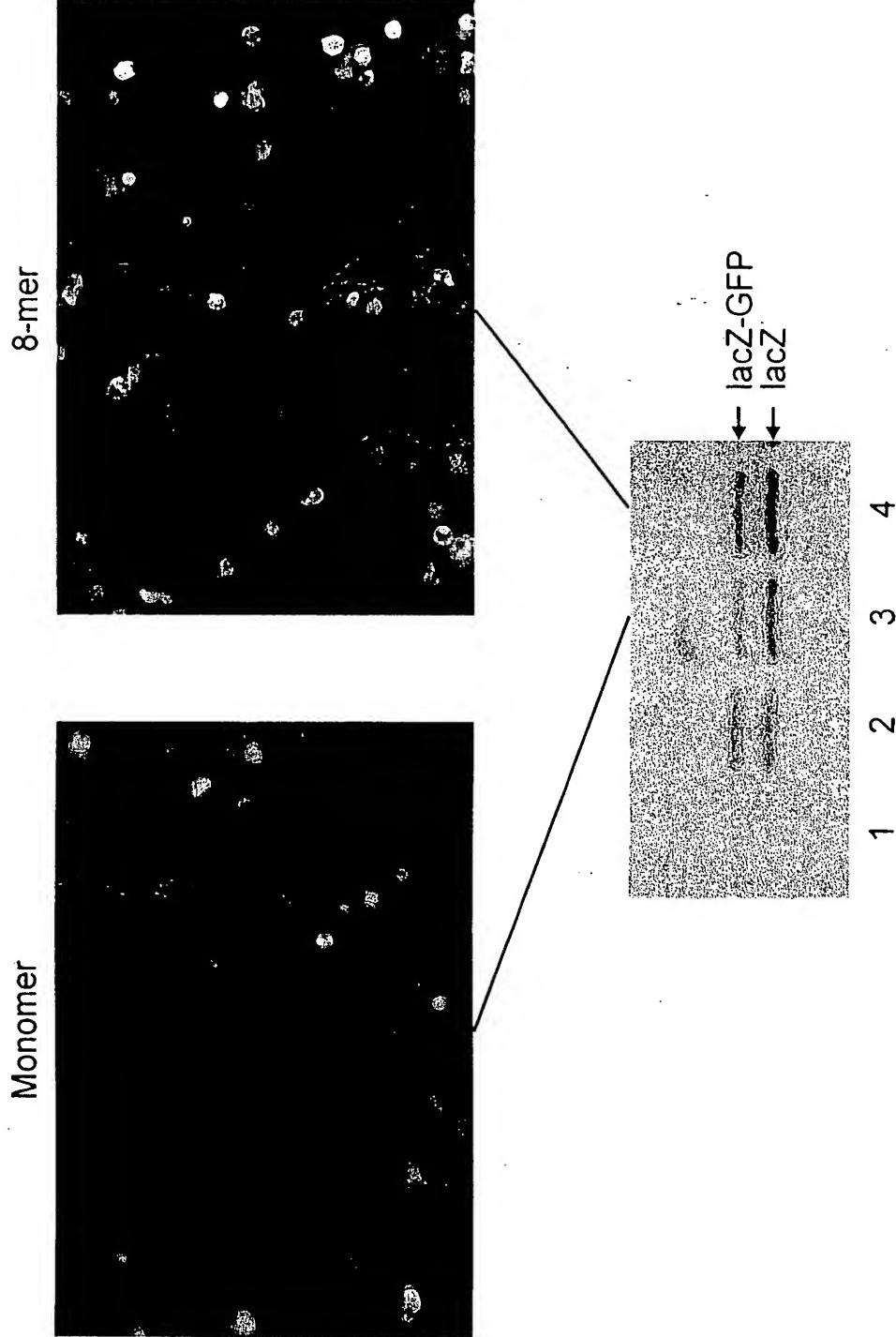
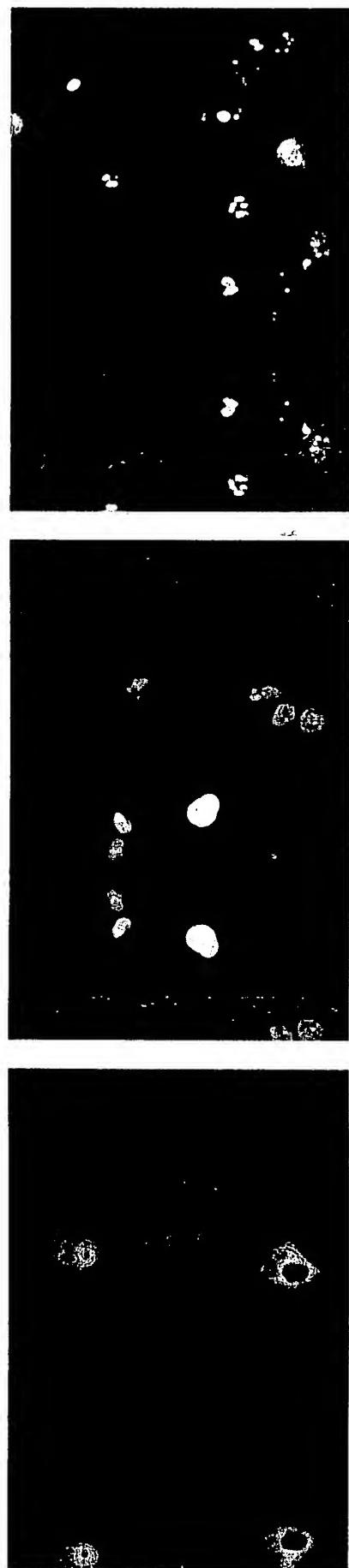


FIG. 53

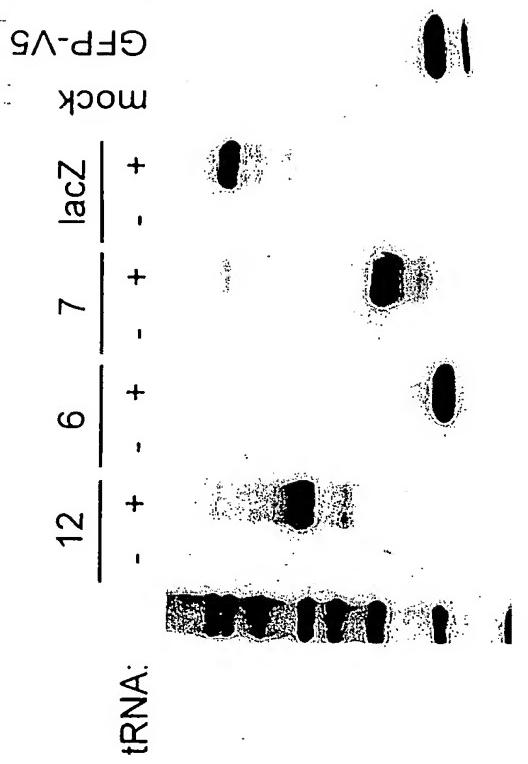
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ORF12 (BC0000141)

ORF7 (BC0000997)

ORF6 (BC003357)



Anti-V5 blot

FIG. 54

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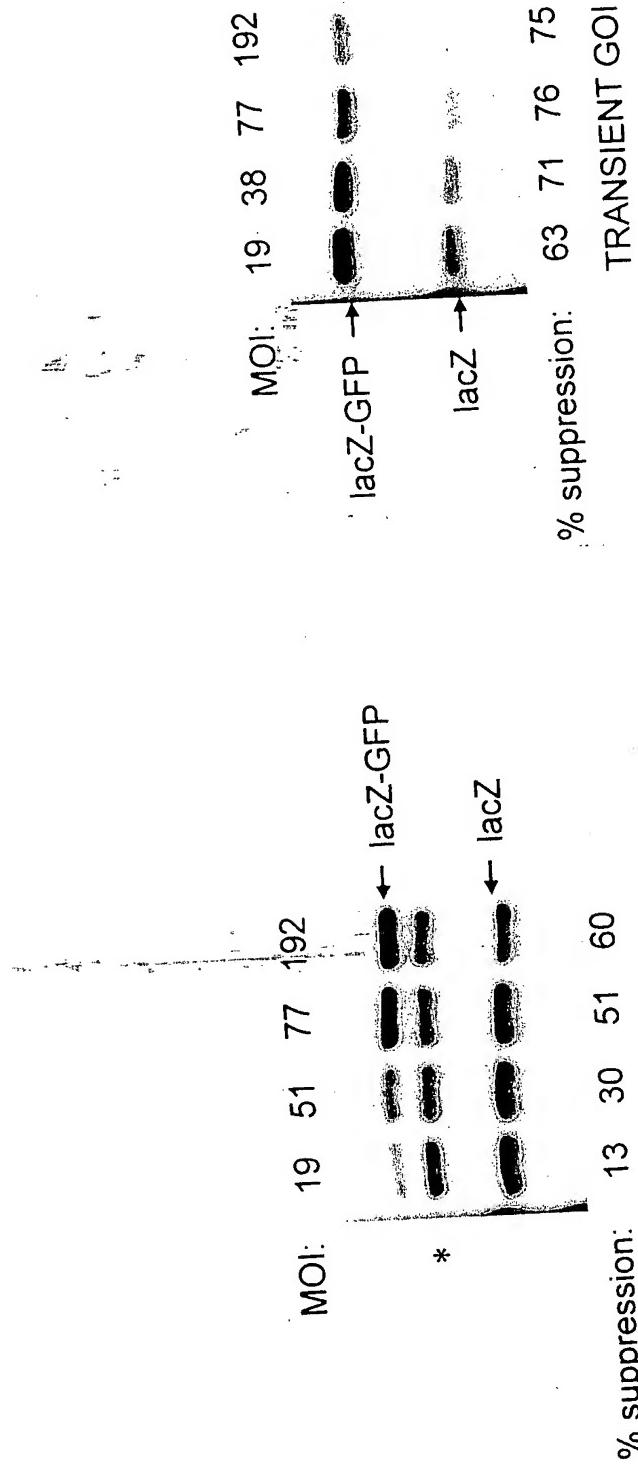


FIG. 55A

STABLE GOI

FIG. 55B

TRANSIENT GOI

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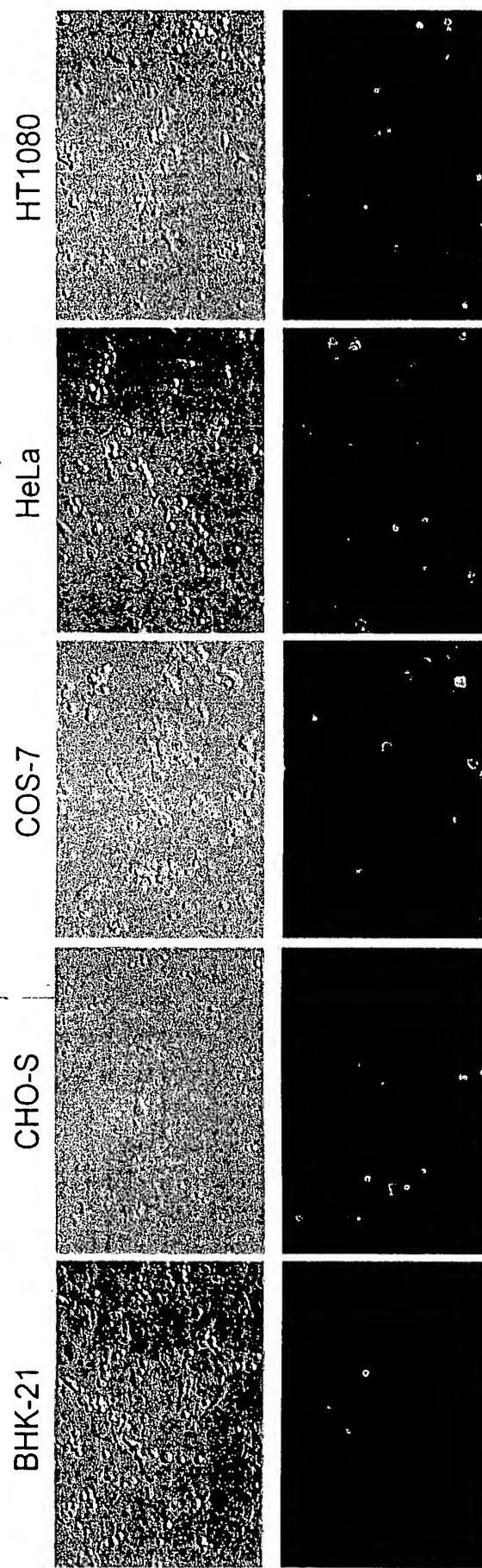


FIG. 56

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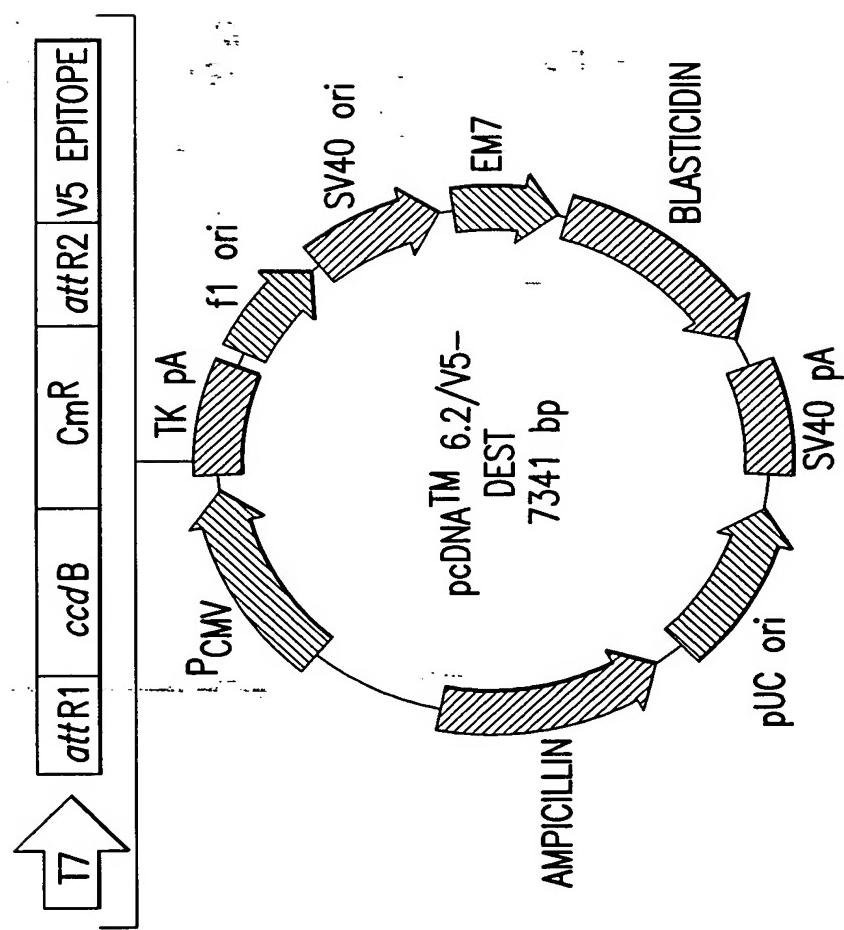


FIG. 57

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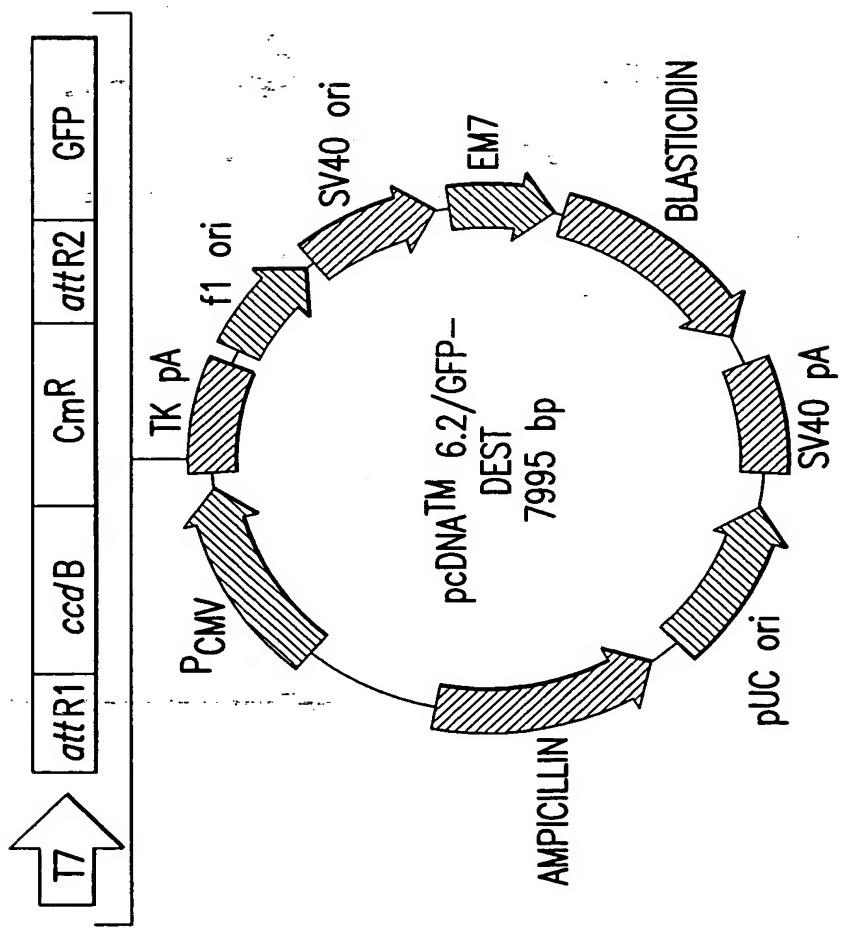


FIG. 58

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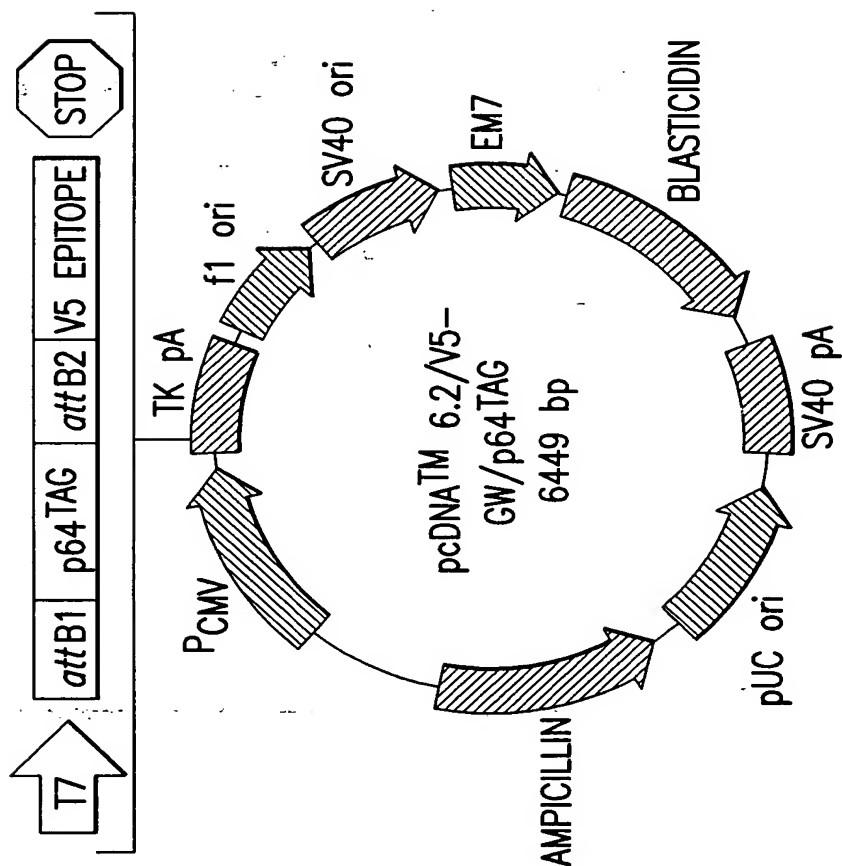


FIG. 59

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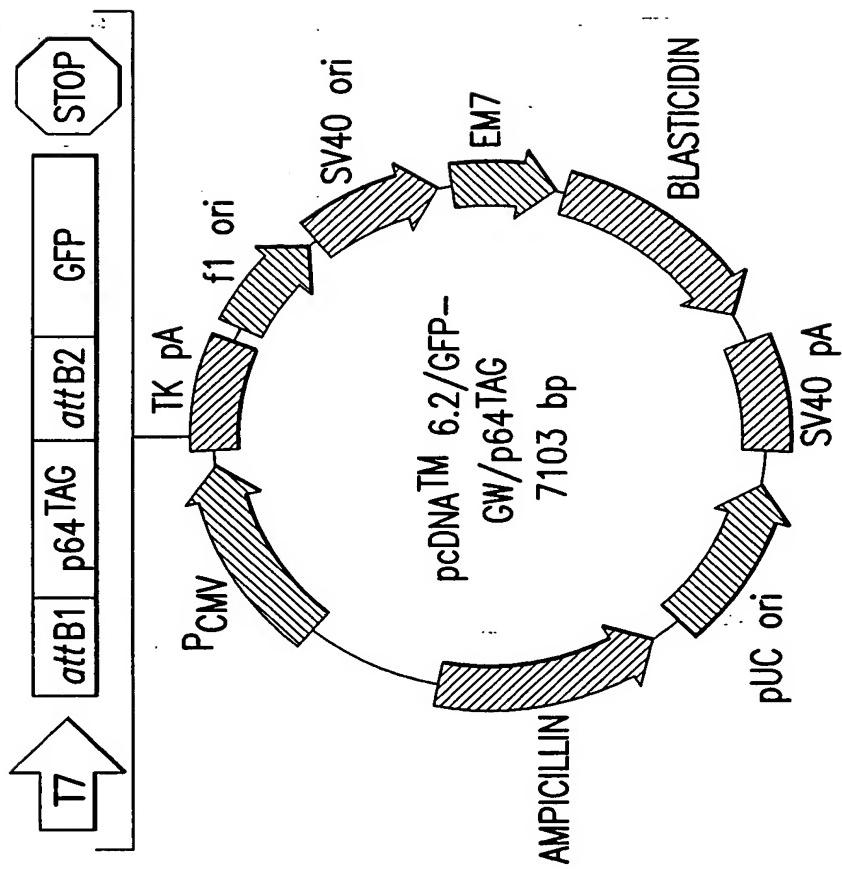


FIG. 60

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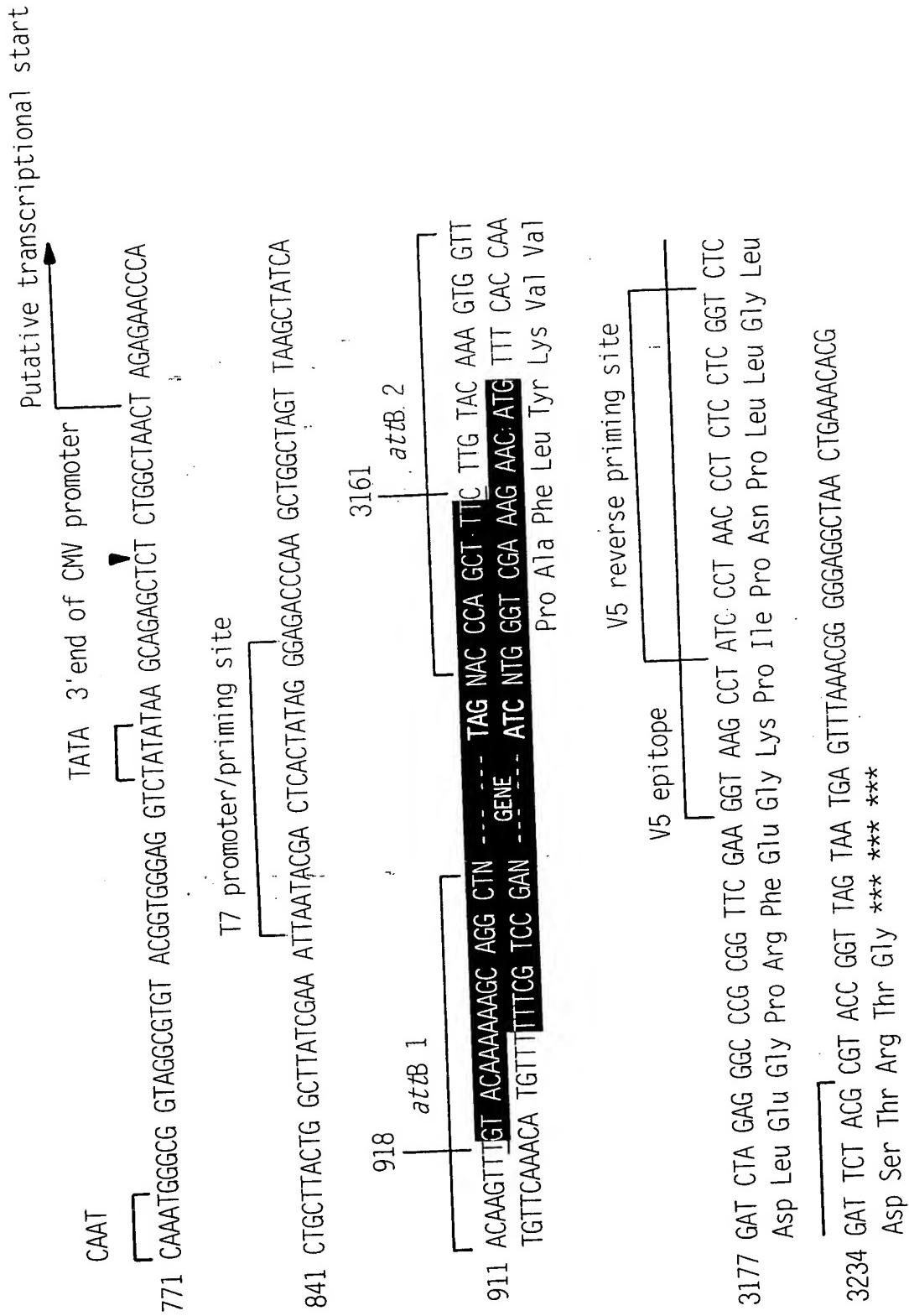
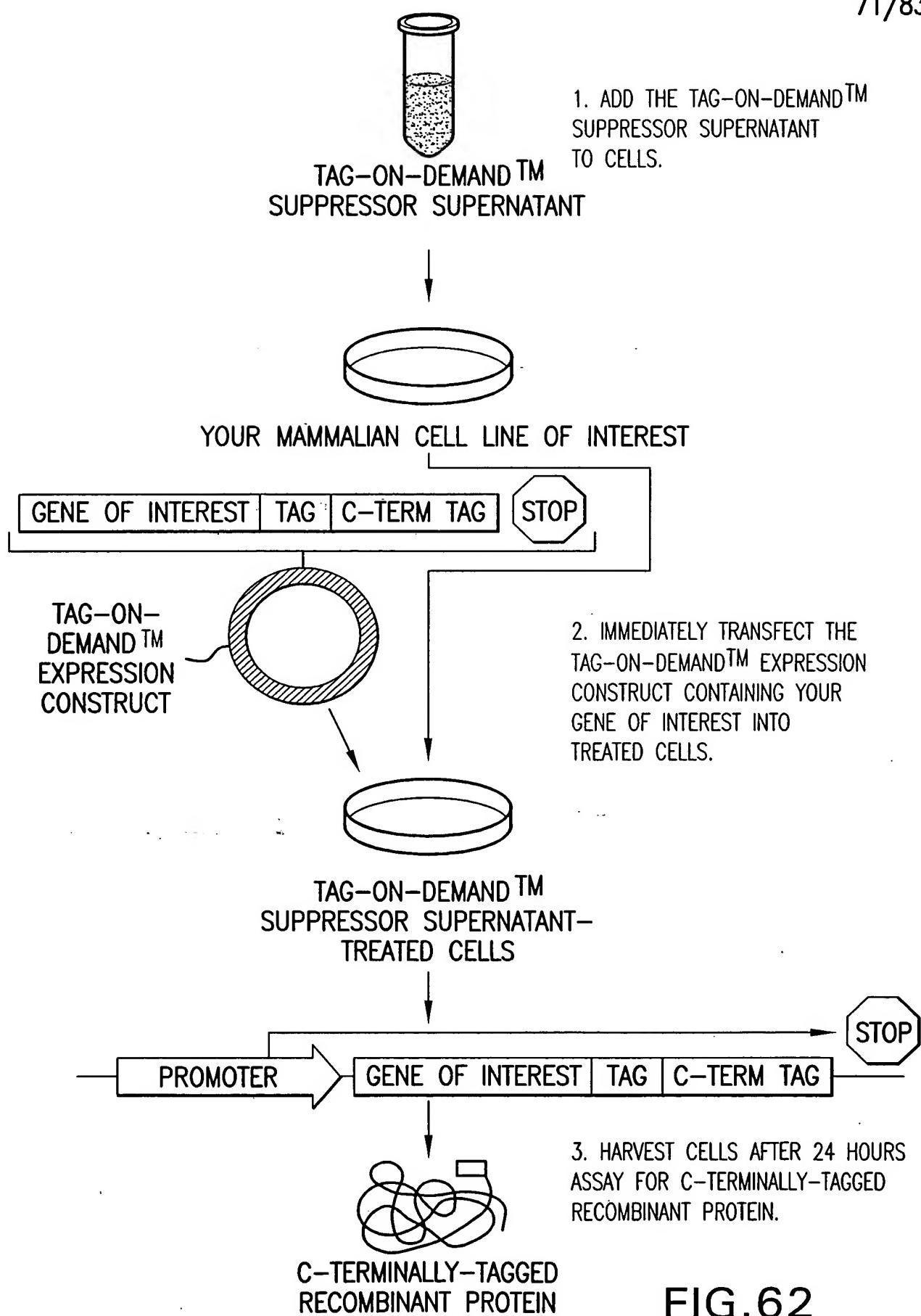


FIG. 61A

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FIG. 61 B

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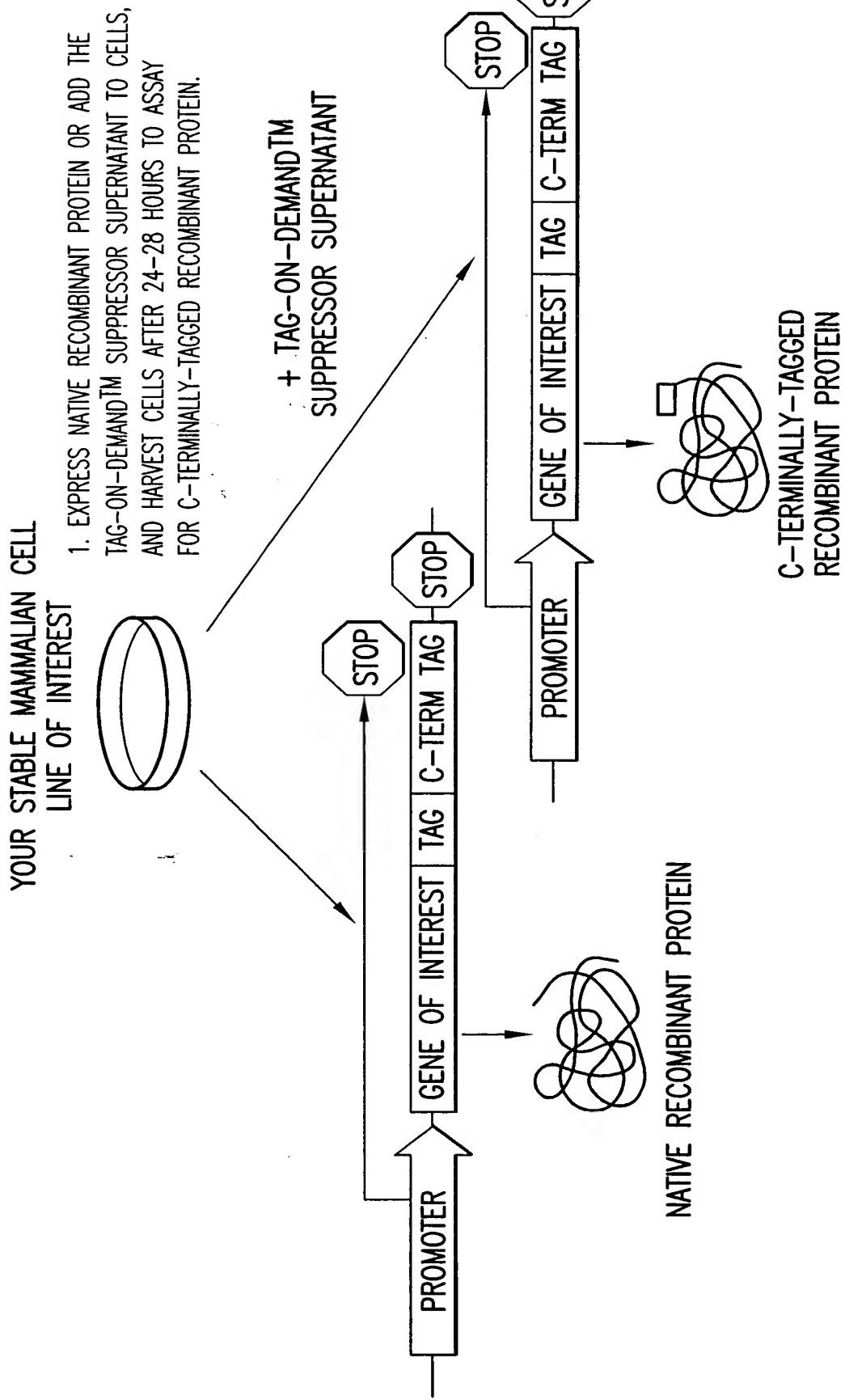


FIG. 63

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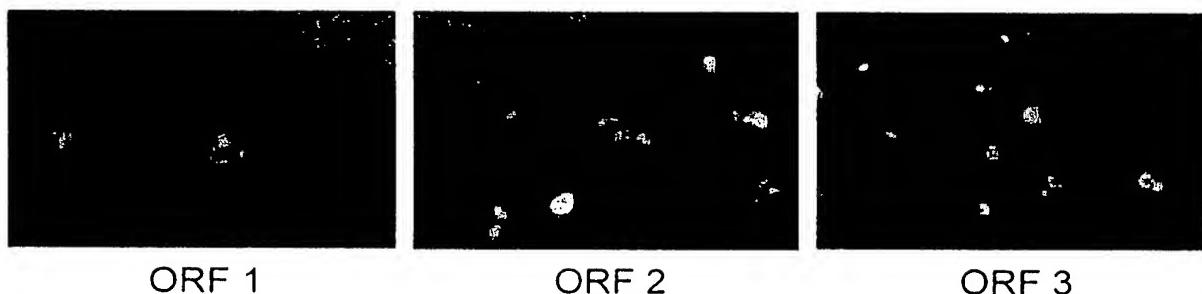


FIG. 64

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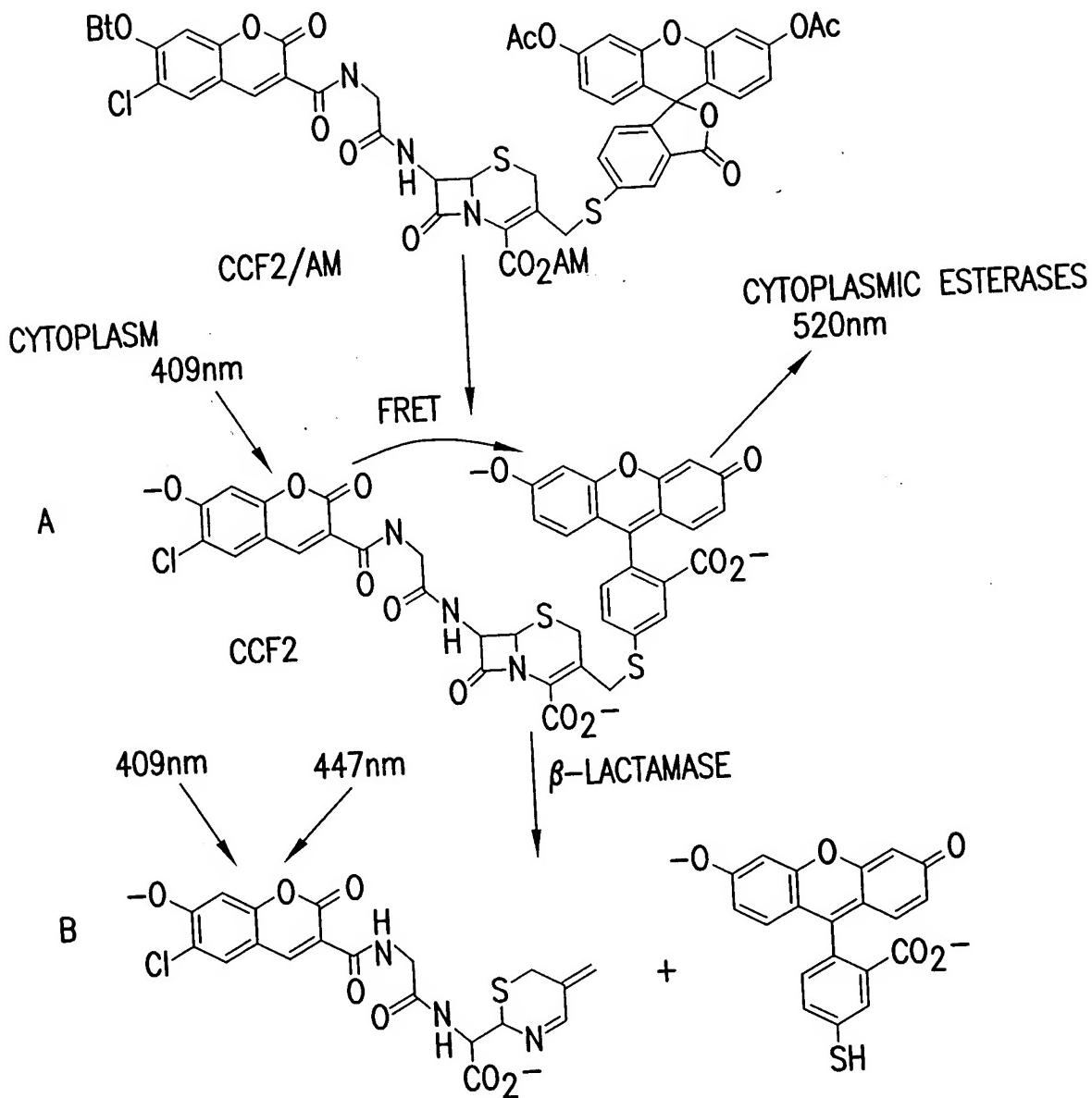


FIG.65

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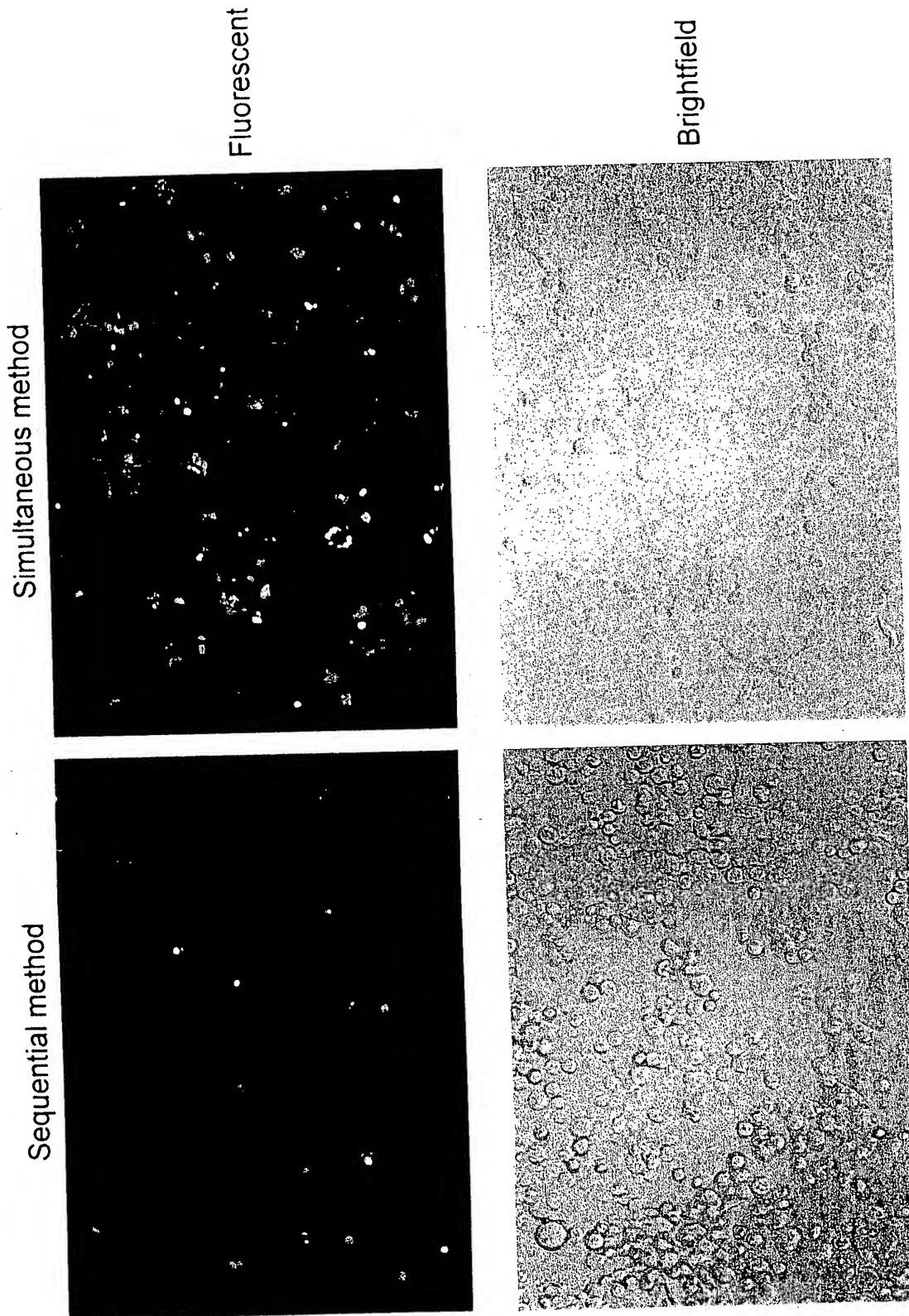


FIG. 66

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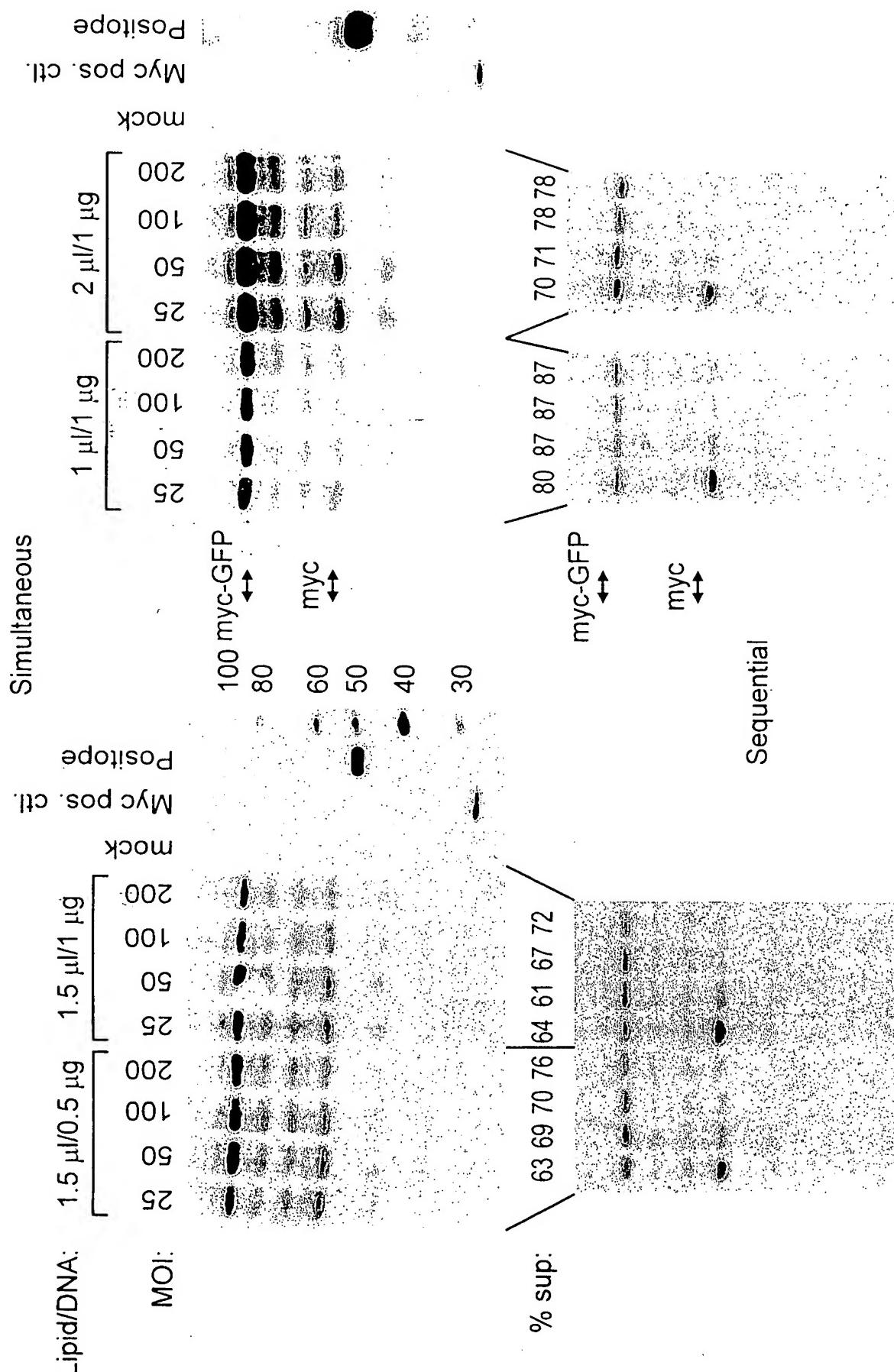


FIG. 67

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1 2 3 4 5 6



FIG. 68

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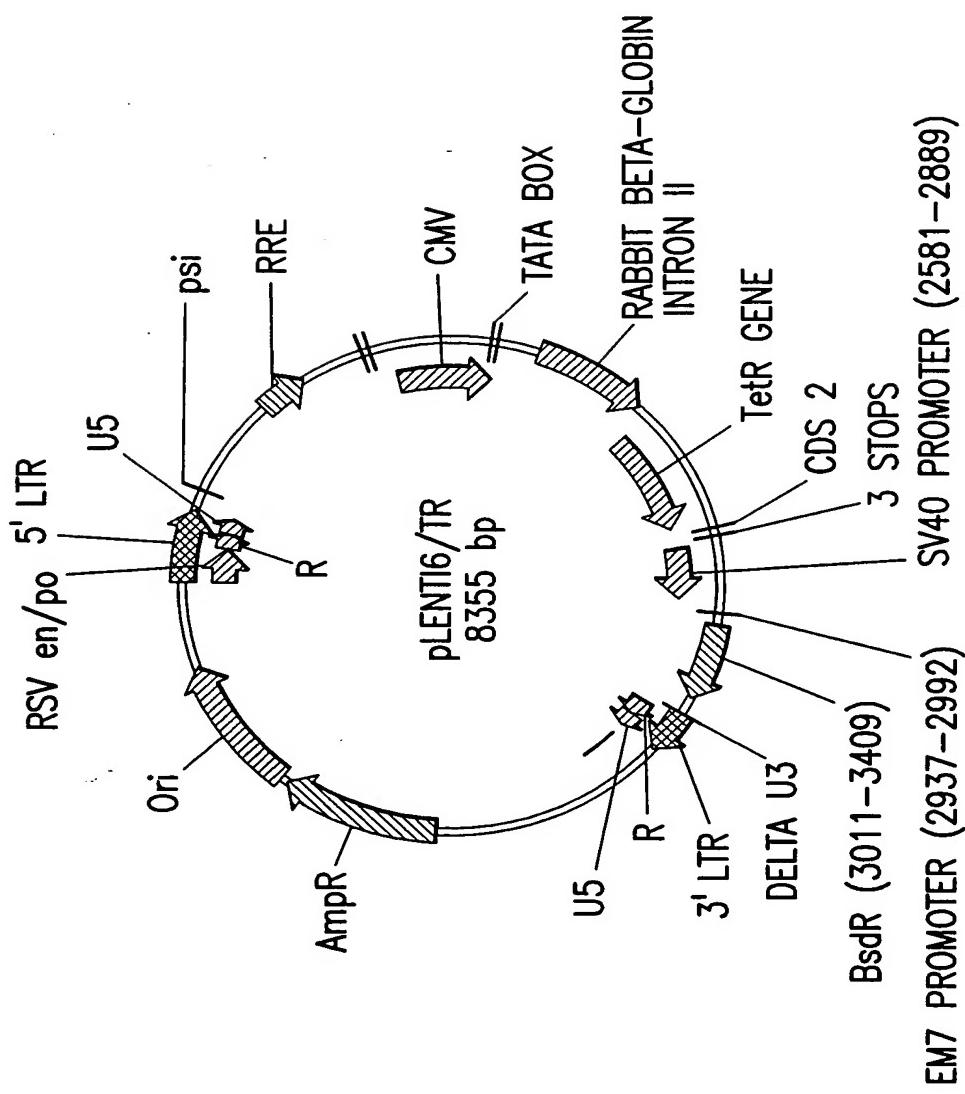


FIG. 69

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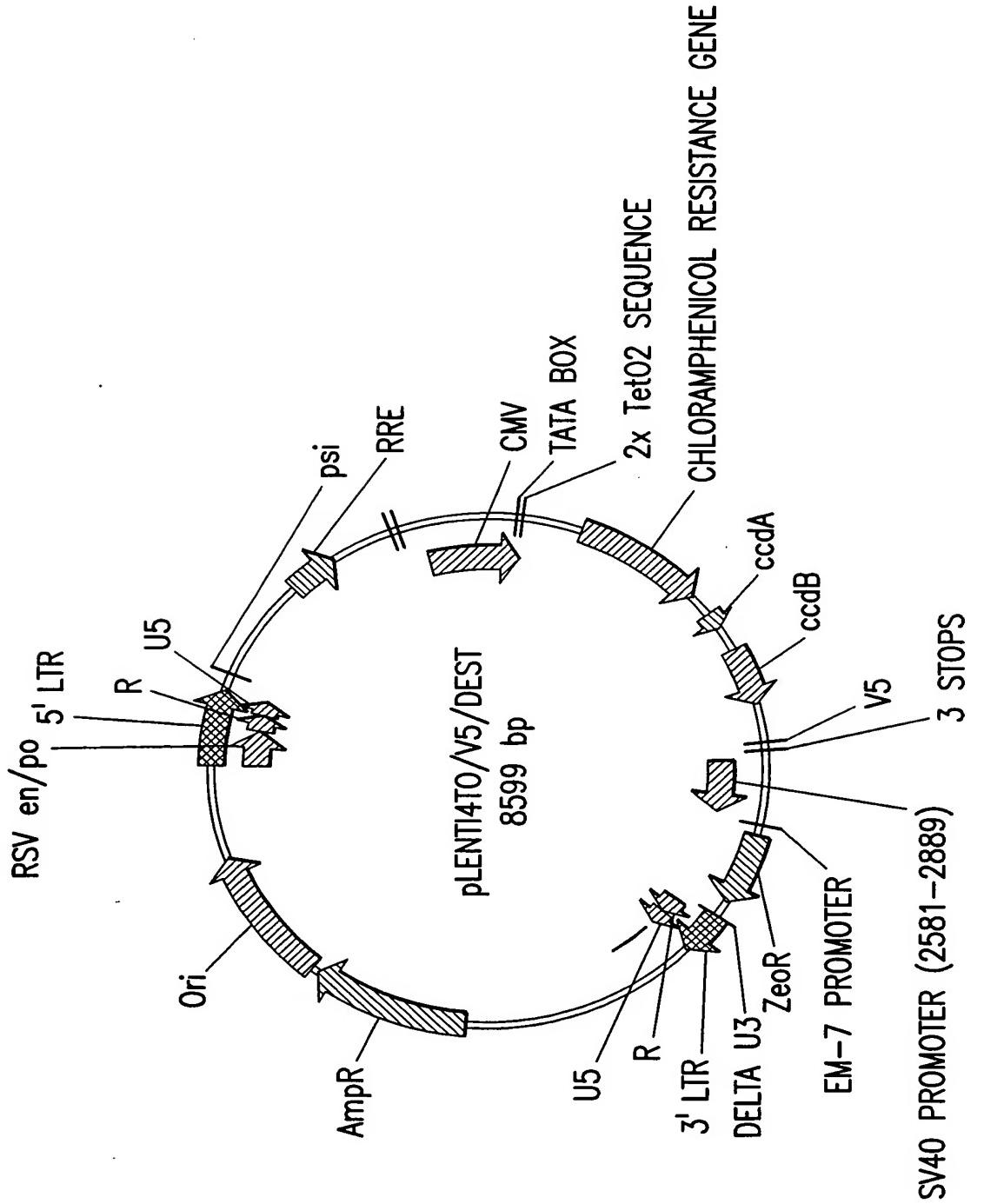


FIG. 70A

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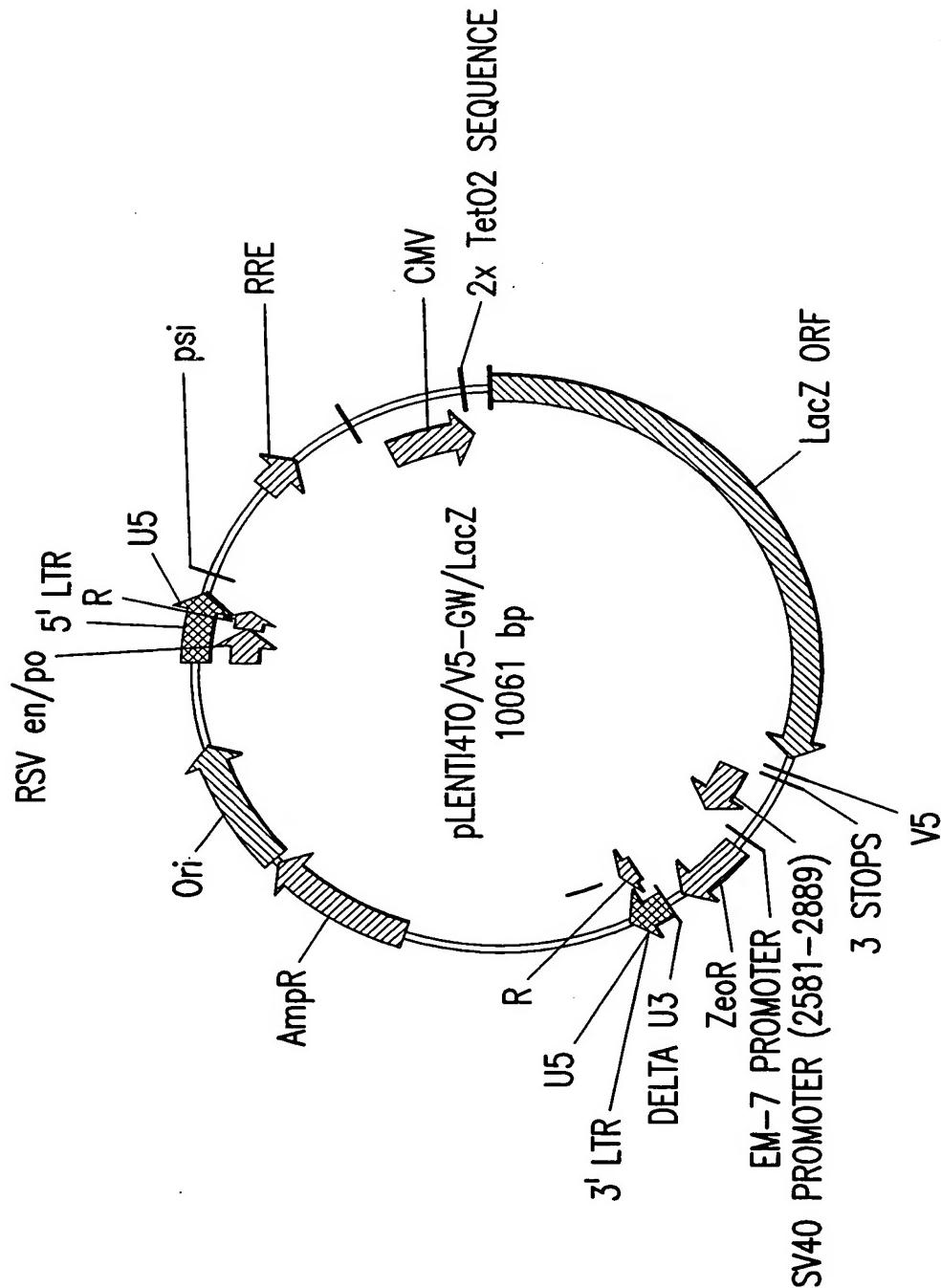


FIG. 70B

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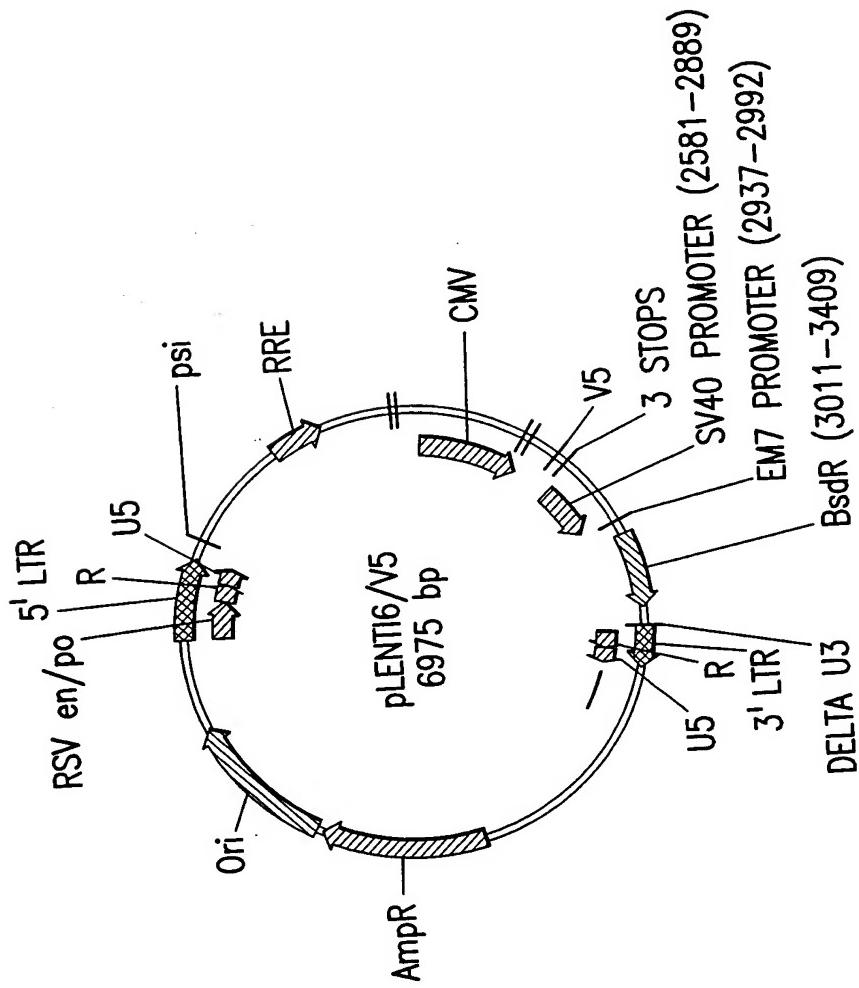


FIG. 71

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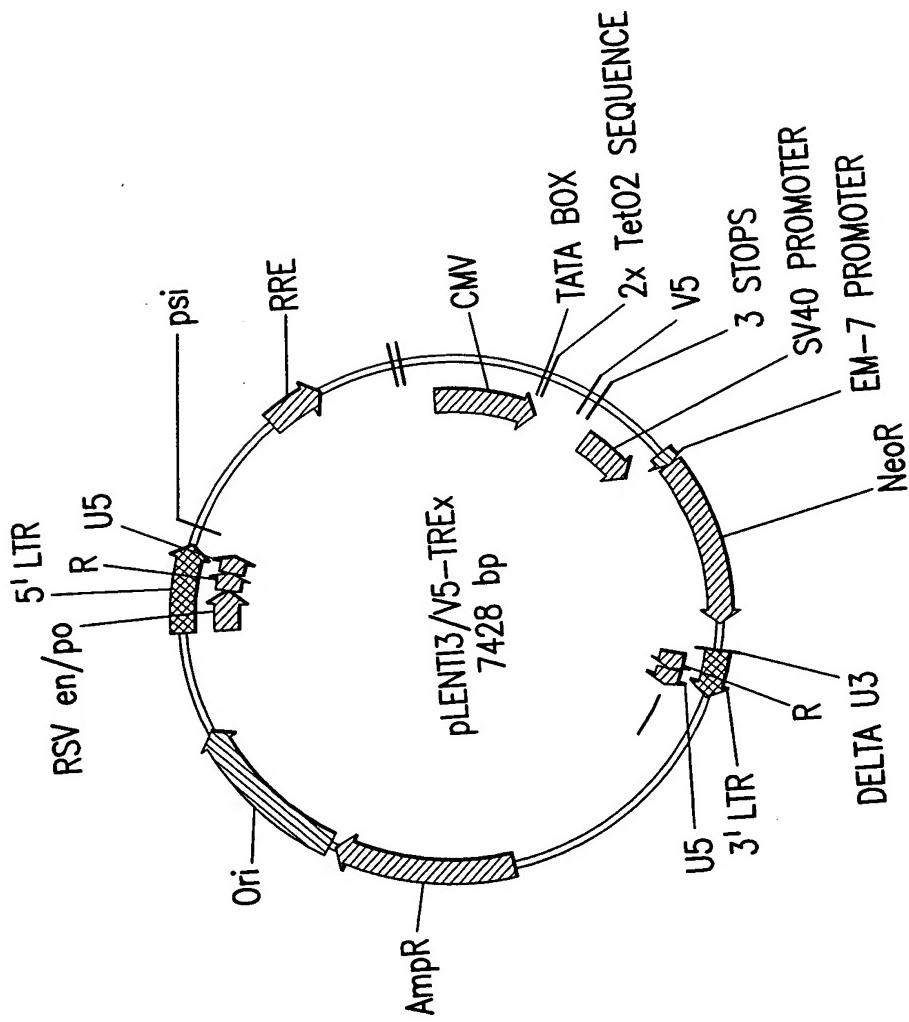


FIG. 72

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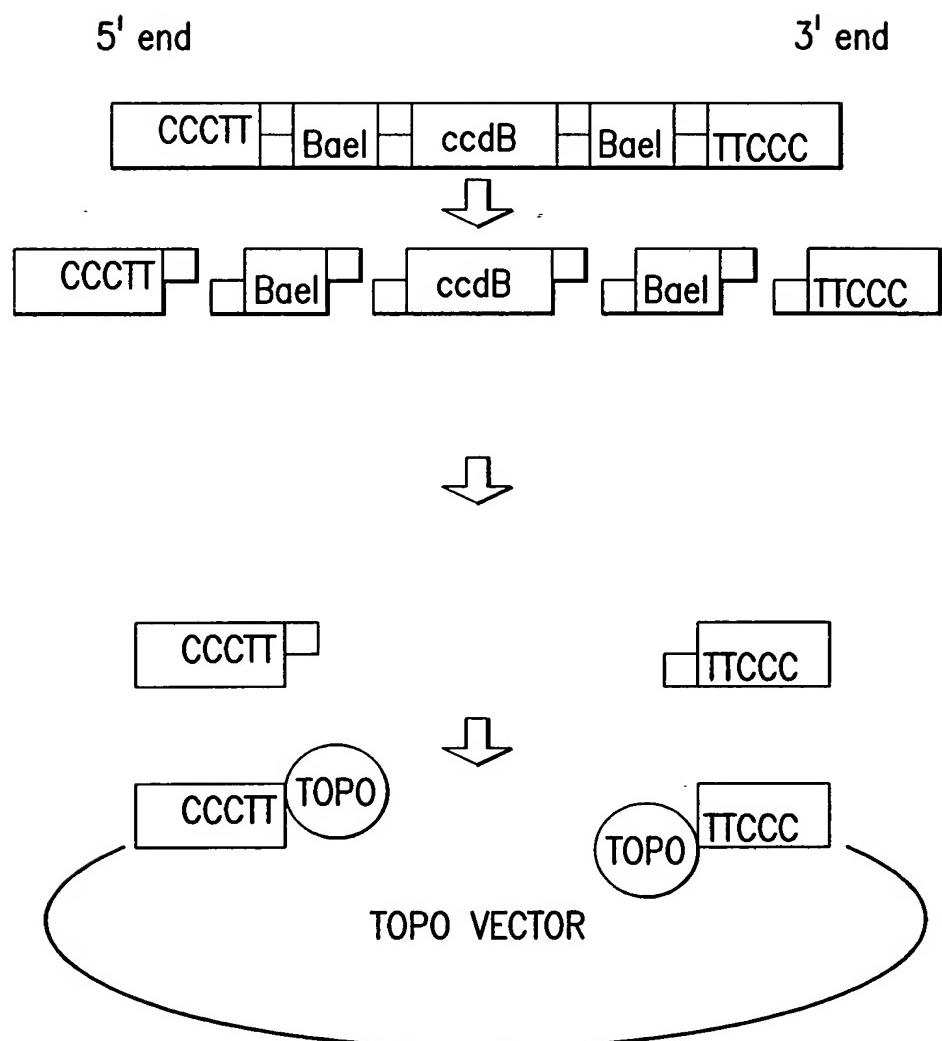


FIG. 73